

School of Engineering and ICT

**Power Relations in Information Technology
Projects: Applying Turner's Three-Process Theory
of Power**

by

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BInfoSys, MComp

Submitted in fulfilment of the requirements for the degree

of

Doctor of Philosophy

University of Tasmania

September 2015

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Yaqian (Michelle) Ye

Abstract

This thesis explores the nature and exercise of power in an Information Technology (IT) project, which involved the implementation of an Information Systems (IS). The existing IS research on power in IS implementation is clustered either in a strong theoretic-low pragmatic grouping, or a strong pragmatic-low theoretic grouping; thus there is little evidence of research being grounded in strong theoretical traditions and strong pragmatic ones as well (Ye et al., 2014). This thesis has improved the situation by associating a new theoretical lens of power with the traditional social and political theories of power used in IS. This new theoretical lens is the Three-Process Theory of Power developed by social psychologist, John Turner (2005) based on Social Identity Theory (SIT) (Tajfel and Turner, 1979) and Self-Categorisation Theory (SCT) (Turner et al., 1987). The findings demonstrate the value of Turner's theoretical lens as well as its insufficiency for explaining all power related activities. This research has led to the development of an extended Three-Process Theory of Power by adding the alternative components that emerged from the data in the case study in relation to the nature and exercises of power. Thus, this thesis contributes to providing a clear and useful picture regarding the sources of power and tactical applications of power in given situations, particularly in IS implementation projects.

Past research on power in IS implementation mainly focuses on the relations between project stakeholder groups such as between project practitioners and system users (Backhouse et al., 2006, Ball and Wilson, 2000, Berente et al., 2010, Doolin, 2004, Hussain and Cornelius, 2009, Markus, 1983, Markus and Bjorn-Andersen, 1987, Silva, 2007, Silva and Backhouse, 2003, Silva and Fulk, 2012, Smith et al., 2010). Evidence revealed that existing research lacked a real analysis of power relations between project team members (Hussain and Cornelius, 2009, Silva and Fulk, 2012), which is in fact an important facet of power relations. More recently, Chang and Yeh (2014) argued that the relationships between intra-project team disagreements and conflict communications are important factors for project performance and decision making. Therefore, it is argued that a deeper understanding of power relations within an IT

project can be gained when including the analysis of intra-project team power relations (Ye et al., 2014). This research study has filled this gap in knowledge by investigating power relations both within and outside the project team in an IT project in the case study. Indeed, evidence from the current study suggests that strategies for effectively managing power relational issues within the project team differed from strategies between the project team and other stakeholder groups. For example, while accepting one's legitimate authority was effective in short-circuiting the unnecessary debates, deliberations, and arguments inside the project team, the project team had to resort to persuasive strategies in dealing with stakeholder relational issues because authority became no longer effective outside the project team since a project leader had no direct legitimate authority over a business stakeholder.

The research methodology employed a qualitative approach that was underpinned by a subjective ontology and an interpretivist epistemology. The research strategy consisted of a longitudinal case study and a two-phase data collection and analysis process. In the first phase, the matters of power relations, politics and group influence emerged from the data collection. In the second phase, noting the emergence of aspects of Turner's theory from the preliminary analysis, a more focused, theoretically informed approach was conducted in which Turner's theory was used as a lens to guide subsequent data collection and analysis. In both phases, data were collected by semi-structured interviews, observations, and examining documents. Interviews were the primary source of data, with the other sources used to contextualise and confirm the researcher's understanding of data throughout the analysis phase. A Grounded Theory based three-phase coding analysis strategy (Creswell, 1998), namely, open coding, axial coding and selective coding, was applied for revealing major themes in the case with extractions of quotations. To establish rigour and trustworthiness in the research process and therefore the findings, this research applied Klein and Myers' (1999) set of criteria for evaluating interpretive field research.

This thesis makes three distinct contributions:

- Theoretical: The augmented Three-Process Theory of Power contributes to the IS discipline and other social science disciplines by building a deeper

understanding of power related behaviours in IT projects. This research also contributes to Turner's theory itself by extending it with the alternative determinants discovered from the case data thereby improving the explanatory power of the theory.

- **Methodological:** The interpretivistic case study approach contributes to Turner's theory by applying it in a real-world study involving complex human relations and consequences of decision making, whereas the other social science research using this theory is commonly conducted by psychological experiments (Wenzel and Jobling, 2006, Willis et al., 2010, Fritsche et al., 2013). These experimental studies tend to provide ready-made and post hoc findings, because they lacked natural social structure or history and real consequences that flow in real situations (Ye et al., 2014). As Turner's theory is relatively new, this novel research, in terms of the theory and the context, has illustrated a solution for coping with the difficulties in applying this theoretical lens thereby guiding future work.
- **Practical:** This research adds to knowledge regarding project management, particularly in the area concerning the effective management of power relations in IT projects. This is achieved by recommending specific guidelines for IT project managers or systems implementers including the do's and don'ts of ways that project managers persuade and overcome human relational (as well as non-human-relational) issues during IS implementation. These recommendations target IS theoreticians and practitioners, and demonstrate what constitutes effective and ethical management of power relations, and what non-human-relational aspects will require attention in setting up and managing IT projects.

Acknowledgement

My heartfelt gratitude goes first and foremost to my team of supervisors – Dr Peter Marshall, Dr Kristy de Salas and Dr Nadia Ollington. Thank you all for the persistent encouragement, guidance and support that you provided me during my candidature.

At first I would like to thank Dr Peter Marshall, who offered me this opportunity and was steadfast in his support and assistance during the candidature. Peter offered a large number of valuable reading resources, assisted with interviews in the first-phase data collection, and constantly encouraged me to discuss and gain a deep understanding of the various social theories. I am deeply grateful for his valuable, welcome, timely and plentiful feedback.

I would especially like to thank Dr Kristy de Salas, who has walked me through all the stages of this research project. Kristy was so approachable that I could always find her when I was struggling with my research. I have gained an incredible wealth of knowledge and professional experience from her, especially around the data analysis process. Without her inspirational guidance, her enthusiasm and her selfless assistance, I could have never come to this stage in the doctoral journey.

Dr Nadia Ollington has my deepest thanks for adopting the role of associate supervisor. Nadia's patience and kindness, as well as her encouragement and belief in me, have been invaluable. She has given me additional insights, coming from a different discipline, and this has greatly improved my understanding of both the theory and methodology.

I have been extremely lucky to have supervisors who cared so much about my work and my life, and responded to my questions and queries so promptly. Without their consistent and illuminating instruction, this thesis could not have reached its present form.

I am also greatly indebted to all the staff and fellow students in the School of Engineering and ICT, who have instructed and helped me in the past four years. In

particular, I would like to thank my officemates, Adeola Bamgboje, Helen Almond, Songlak Sakulwichitsintu and Nadish Kariyawasam. I will miss the days that we worked together, helped each other with study and life, and shared experiences of all the ups and downs in the doctoral journey.

Special thanks to Marilyn Taylor and Nigel Ewan for their help and support in the research study. Completing this work would have been more difficult were there not the resources, support and opportunities that they provided.

I would like to acknowledge the contributions made by my co-authors in previous publications. I would also like to thank all the valuable feedback that has been provided by the anonymous referees from the following conference, book publisher team and journals.

- Australasian Conference on Information Systems (ACIS) 2012, 2015
- IGI Global 2014
- Qualitative Sociology Review (QSR)
- Information Systems Journal (ISJ)
- Australasian Journal of Information Systems (AJIS)
- MIS Quarterly

I also owe my sincere gratitude to all my friends who offered time in listening to me and helping me work out problems in my study and life. I wish to thank Lyell Wilson particularly for his friendship and help with my study. From every chat with him, I gain a considerable amount of inspiration and advice in improving my thinking and conduct in research.

I am grateful to my parents and my partner, Justin Bryen. They are the beloved family who always encourage and support me with my life and my study. Without their unconditional support and belief in me, this thesis could not have been possible.

ACRONYMS

IS	Information Systems
IT	Information Technology
SIT	Social Identity Theory
SCT	Self-Categorisation Theory
RQ	Research Question
SRQ	Subsidiary Research Question
SS	Student System (the case study project)
ERP	Enterprise Resource Planning
VC	Vice Chancellor
DVC	Deputy Vice Chancellor
PVC	Pro Vice Chancellor
CEO	Chief Executive Officer
COO	Chief Operating Officer
CIO	Chief Information Officer
CFO	Chief Financial Officer
AD	Associate Dean
SSC	Student Services Centre
RD	Research Division
ITD	IT Division

SM	Senior Management
BS	Business Stakeholders (Administrative Group)
TM	IT Division Management Group
TO	Transition Support Group
PL	Project Leaders
PM	Project Middle Management
BA	Business Analysts
TW	IT Workers
TT	Training Team

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CHAPTER ONE

INTRODUCTION

1. CHAPTER ONE – INTRODUCTION

1.1. INTRODUCTION

This thesis explores the application value of Turner's (2005) Three-Process Theory of Power in explaining power related behaviours in Information Technology (IT) projects, in particular Information Systems (IS) implementation projects. An interpretive case study of an IS implementation was conducted to investigate power and power relations within a university in the Asia Pacific region. The purpose of this chapter is to provide an introduction to the research presented in this thesis. In doing so the chapter is divided into the following sections:

- Section 1.2 introduces the background into the research problems and identifies the gap in knowledge in the field. The identification of the research gap forms the basis of the research aims, questions and objectives.
- Section 1.3 presents the research aims and objectives.
- Section 1.4 outlines the overarching research question and subsidiary research questions.
- Section 1.5 describes the research context in which the study was conducted. The research was situated in the context of implementing and institutionalising an information system in a contemporary organisation.
- Section 1.6 presents an overview of the research approach adopted for this research.
- Section 1.7 presents a summary of the contributions of this research to IS knowledge at theoretical, methodological and practical levels.
- Section 1.8 presents a summary of the limitations of this research.
- Section 1.9 provides an overview of the thesis structure, outlining the remaining chapters.
- Section 1.10 provides a summary of the chapter.

1.2. BACKGROUND

The research context for the current study is an IT project, specifically an IS implementation project. Among various types of IT projects, software development and system implementation projects play a critical role (Heiskanen and Newman, 2008, Dhillon, 2004). Despite both being IT projects, these two types of IT projects vary in nature. While software development type of IT projects concerns functional outcomes that require attention to be drawn on methodology used, progress against schedules and budgets, and system quality, system implementation projects tend to focus on a high quality 'change' outcome in relation to user satisfaction, system use and benefits of use (de Waal and Batenburg, 2014). In this light, software development projects and system implementation projects differ in the role of power within them: the former usually only concerns client-vendor relationships (Heiskanen and Newman, 2008); the latter provides a context in which organisational power relations and relationships between a wider range of stakeholders are involved (e.g. project sponsor, vendor, change recipient, change agent) (Dhillon et al., 2011). Therefore, an IS implementation type of IT project was chosen for the current research as the researcher seeks to explore a deep understanding of power relations in achieving both a high quality system functional outcome and a high quality 'change' outcome for user adoption.

IT project management is a task with many challenges (Seddon et al., 2010, Keil and Mahring, 2010, Iacovou et al., 2009, Avison and Torkzadeh, 2008) and the research into IT project management has identified many critical success factors along with corresponding reasons for failure (Flowers, 1997, Kappelman et al., 2006, Oz and Sosik, 2000). The factors identified as being implicated in IT project failure include a lack of top management commitment to the project, lack of corporate leadership (including a weak project champion), inadequate information requirements determination, communication issues, organisational politics, lack of user involvement and participation, and change management problems generally (Liebowitz, 1999, Oz and Sosik, 2000, Kappelman et al., 2006, Grainger et al., 2009).

Given that political issues are among the critical factors for failure of the IS implementations (Grainger et al., 2009, Kappelman et al., 2006, Liebowitz, 1999, Oz and Sosik, 2000), power and how it is exercised, are important factors in successful IT projects (Jasperson et al., 2002). IT projects redistribute information and power in organisations, and thus power relations are implicated in IT projects and affect both project progress and ultimately project success (Doolin, 2004, Hussain and Cornelius, 2009, Berente et al., 2010, Ball and Wilson, 2000, Silva and Backhouse, 2003, Backhouse et al., 2006, Smith et al., 2010, Silva and Fulk, 2012). The effective and ethical use of power may be necessary in order to achieve innovation and change through IS implementation projects (Ngwenyama and Nielsen, 2014). Indeed, while ‘power over’ may imply domination and bullying (Clegg, 1989c, Dahl, 1957), ‘power to’ may imply the need to exercise power in order to get things done (Clegg, 1989c, Gohler, 2009). The lack of an adequate conceptualisation and understanding of power and power relations can lead inevitably to an impoverished understanding of organisational behaviours and social interaction in project settings (Marshall et al., 2010).

Past research on power in IS implementation provides an understanding of the complexity and interrelationships of power relations, resistance, and the success or otherwise of IS implementation projects (Hussain and Cornelius, 2009, Smith et al., 2010, Silva, 2007, Silva and Backhouse, 2003, Silva and Fulk, 2012, Doolin, 2004, Berente et al., 2010, Ball and Wilson, 2000, Markus and Bjorn-Andersen, 1987, Howcroft and Light, 2006, Levine and Rossmore, 1994, Cavaye and Christiansen, 1996, Azad and Faraj, 2011, Pozzebon and Pinsonneault, 2012, Markus, 1983, Dhillon, 2004, Backhouse et al., 2006, Peszynski and Corbitt, 2006, Dhillon et al., 2011, Spiegel et al., 2012). However, this research mainly focuses on the relations between project stakeholder groups such as project practitioners and system users, with no real analysis of intra-project team power relations. Given research findings suggesting that the relationships between intra-project team disagreements and conflict communications are important factors for project performance and decision making (Chang and Yeh, 2014), it is argued that a deeper understanding of power relations within an IS implementation can be gained when including the analysis of intra-project

team power relations (Ye et al., 2014). This constitutes room for further investigation of the nature of power within IS implementations.

There is a considerable amount of literature in the IS discipline focused on the way power relations in IT projects affect the implementation and institutionalisation of information systems. Most IS literature on power is focused on the work of social and political theorists including:

- Theories of discipline and power of the French philosopher, Michael Foucault (Doolin, 2004, Knights and Vurdudakis, 1994, Doolin, 1999),
- Three Dimensions of Power of the British political and social theorist, Steven Lukes (Howcroft and Light, 2006, Markus and Bjorn-Andersen, 1987),
- Structuration Theory of the British sociologist, Anthony Giddens (Hussain and Cornelius, 2009, Brooks, 1997, Chu and Smithson, 2007, Spiegel et al., 2012),
- Circuits of Power theory of the Australian sociologist, Stewart Clegg (Smith et al., 2010, Silva, 2007, Silva and Backhouse, 2003, Silva and Fulk, 2012), and
- Actor-Network Theory of the French philosopher, Bruno Latour (Bloomfield, 1991, Bloomfield et al., 1997, Bloomfield, 1995).

However, the work of most of these theorists is highly abstract and fails to deliver a clear and useful picture regarding the sources of power and tactical applications of power in given situations, particularly in IS implementation projects. In particular, despite being extensively applied, the work of Giddens, Foucault and Clegg provides a broader and more societal focus in the description of power (Ye et al., 2014).

The work of Lukes (1974), is focused on power in decision-making processes, and hence relates more closely to matters of interest in IS implementation projects. Lukes also includes 'non-decisions' in his analysis. This relates to how powerful actors can avoid decisions on issues that are worrisome or awkward for them. This part of his work also addresses the ability of power to shape values, cognitions, and perceptions of people so that grievances and issues will not arise (Hardy, 1985). However, Lukes' work does not give a clear analysis of the sources of power and thus omits a number of

structural concepts that can be utilised by practitioners in setting up IT projects. Therefore the analysis based solely on Lukes' theory would fail to offer practical guidance regarding the effective management of power in IT projects.

Latour (2005, 1986) provides a link between power and technology, and as such is potentially useful for understanding power in IT projects. Despite emphasising the importance of paying attention to power relations and resistance in the process of building actor-networks, Latour does not provide IS practitioners with tangible themes that can be used for explaining actual power exercises or providing management tactics for resistance behaviours (Ye et al., 2014).

However, there are also a few recent publications by academics in the IS field that contribute a pragmatic and tactical analysis of power relations in IS implementations (Mathiassen and Napier, 2014, Sabherwal and Grover, 2010). While more practical and useful, these contributions lack a theoretical grounding in the behavioural science underpinning the behaviours they describe (Ye et al., 2014). The IS research on power in IS implementations is currently clustered either in a strong theoretic-low pragmatic grouping, or a strong pragmatic-low theoretic grouping; there is little evidence of research being grounded in strong theoretical traditions and strong pragmatic ones as well. This thesis aims to improve this situation by presenting a new theory which provides researchers with a basis for theoretically informed yet practical research in power relations in IS implementation projects.

Specifically, the Three-Process Theory of Power of the Australian social psychologist, John Turner (2005) based on the social identity approach comprising Social Identity Theory (SIT) (Tajfel and Turner, 1979) and Self-Categorisation Theory (SCT) (Turner et al., 1987, Turner, 1987b), will be presented as a reference theory for IS researchers interested in the area of power relations. Turner's (2005) Three-Process Theory of Power is relatively consistent with the work of the social theorists mentioned above that have been already familiar to IS audiences. The contribution of Turner's theory to IS can be strengthened by associating these theorists together regarding the operation of power (i.e. the three processes of power), and meanwhile introducing the social identity approach concerning the nature of power (i.e. psychological group formation).

The social identity approach (i.e. SIT and SCT) has potential to contribute to the understanding of power and effective IT project management as it concerns the formation of psychological groups and intra- and intergroup behaviours. For example, a person in a project team with very high IT skills may be able to, in some contexts, exert more authority than his/her position in the organisational hierarchy would predict. With the priority of an IT project, the IT professional, together with their IT group may be able to improve the project progress by getting a higher-level manager's support in engaging the group of users.

Turner's (2005) theory of power changes the way that the processes of exercising power are traditionally understood by reversing its causal sequence. The traditional theories of power base their analyses on the control of resources as the source of power (Deutsch and Gerard, 1955, Festinger, 1950, French and Raven, 1959, Kelman, 1958). According to these theories, the control of resources is seen to lead to the capacity to influence (i.e. power). This can then lead to the application of influence (power in action), and this leads in turn to psychological group formation, which surfaces and manifests as cohesive interpersonal relations and a supportive consensual social structure for the group concerned (Keltner et al., 2003). Turner's theory turns this causal sequence on its head and argues it is psychological group formation that is the basic source of power. The formation of a psychological group leads to the capacity for some members of the group to have influence over other members. This is realised or accomplished through the processes of persuasion, authority, and coercion (respectively). Indeed, Turner sees power in organisations and other social structures as enacted by these processes in a complex interlinked and overlapping set of psychological groups (Turner et al., 2008). Persuasion, authority and coercion are ways of exercising power, or, in other words, exerting one's will over others. The application of power in this way leads to the gaining and controlling of resources, which can then, in turn, play a further part in the exercise of power.

The social identity approach has been useful in understanding various power-related behaviours in social psychology (Hornsey et al., 2005, Robertson, 2006, Hogg et al., 2005, van Knippenberg and van Knippenberg, 2005, Platow et al., 2006, Wenzel and

Jobling, 2006, Ullrich et al., 2009, Willis et al., 2010, Burns and Stevenson, 2013, O'Brien and McGarty, 2009, Fritzsche et al., 2013), and in the context of IS implementations (Tansley et al., 2013, Schwarz and Watson, 2005). However, the Three-Process Theory of Power has not been used in any other research as a theoretical lens to study power in IS implementation projects. The current research is intended to carry out a case study to determine what insights Turner's theory of power provides into power relations. Through analysing the three processes of exercising power through persuasion, authority and coercion, this theory could constitute a real opportunity for researchers in IS and other social science disciplines to increase and deepen the understanding of power relations by answering the questions of 'where power is from' and 'how power is exercised'. In preparing to take up such a research opportunity one notes in passing that Turner seems to indicate that all power springs from psychological group formation. However, one would have to question whether there may be other sources of power, rather than one unique source as suggested by Turner (2005) and Festinger (1950).

1.3. RESEARCH OBJECTIVES

The purpose of this thesis is to contribute to the knowledge of the effective management of power relations in IT projects. Given this purpose and the above considerations, this research project has two objectives. One is the investigation of power relations during an IS implementation, including not only the power relations between stakeholder groups but also the intra-project team power relations. The second objective and motivation of this research is to explore the value of a new lens with which to view power – Turner's (2005) Three-Process Theory of Power and to compare the findings using Turner's theory with the insights generated by the existing social theories used in the IS discipline.

These two objectives are interrelated as introducing and validating a new theoretical lens of power builds a deeper understanding of power relations in the given context. Differences and similarities with the social and psychological experimental studies will

be noted, but a deeper and richer picture of the nature of power relations is expected to emerge via the case study method.

1.4. RESEARCH QUESTIONS

In order to meet the objectives above, the overarching research question and its subsidiary research questions have been developed.

The overarching research question (RQ) is:

RQ: What level of understanding and what insights are provided by using Turner's Three-Process Theory of Power as a theoretical lens to investigate power relations in IT Projects?

The subsidiary research questions (SRQs) are:

SRQ1: What are the main principles and ideas of Turner's Three-Process Theory of Power? What are the possible implications for power relations in IT projects?

SRQ2: What are the significant theories that have been used to understand and explain power relations in IT projects? How does Turner's theory compare with these theories? What are the significant differences?

SRQ3: What are the major issues and problems that affect the implementation and institutionalisation of IT projects?

SRQ4: What is the nature of power? Does power emerge from only one source (psychological group formation), or does power emerge from other sources such as the several bases as French and Raven (1959) assert in their classic paper?

SRQ5: Does an IT project leader gain influence over others in the project when they are in the same psychological group with the target(s)?

SRQ6: Does the formation of different psychological groups in organisations influence the power relations that affect the implementation and institutionalisation of IT projects?

SRQ7: Does power consist of persuasion, authority and coercion? Is power applied through processes of persuasion, authority and coercion and what is the nature of these processes?

SRQ7a: How is persuasive power gained and exercised in the management of IT projects?

SRQ7b: What role does the power that emerges from legitimate authority play in the management of IT projects?

SRQ7c: What role does coercive power play in the management of IT projects?

SRQ8: Does Turner's theory give a reasonable explanation for the phenomenon of resistance behaviours involved in IT projects?

1.5. THE RESEARCH CONTEXT

This research is based on a case study at a higher education institution – AsiaPac University (pseudonym). The focus of analysis in the case study was the exercise of power and power related behaviours throughout the implementation of a large student system (SS), named the SS project.

Specifically, as will be discussed in Section 3.3, the SS project in AsiaPac University was selected as the research site because the project was overlaid and troubled with politics and power relational conflicts. These power relational conflicts resulted from the following issues:

- the large scale and the complexity of the project;
- the multiple project timeline and budget overruns;
- the political culture and siloed governance structure of the university, which led to ineffective communication;
- the university instability in decision making and organisational structure, and the high university staff turnover; and

- the significant project structure changes and high project staff turnover.

These power related issues, including the reasons behind these issues inhibiting the project and the strategies that were used to manage the issues, were of great value to this research. The understanding of the factors affecting the project contributes to the knowledge of effective IT project management.

1.6. RESEARCH APPROACH

The research methodology was underpinned by a subjective ontology and an interpretivist epistemology. The research adopted a three-stage design. Research stage one – **Understanding the Theory** involved building a theoretical framework comprising Turner's Three-Process Theory of Power with a comparative combination of other theories of power. Research stage two – **Applying the Theory** involved a longitudinal case study conducted through the theoretical framework so as to examine whether Turner's theory would reflect reality and to uncover any hidden elements that had not been identified in the framework. Research stage three – **Evaluating Findings of Applying the Theory** involved reviewing and evaluating the findings by using evaluation principles.

Specifically in research stage two, the data collection and analysis were conducted in two phases. In both phases, data were collected by semi-structured interviews, observations and examining documents. Interviews were the primary source of data, with the other sources used to contextualise and confirm the researcher's understanding of data throughout the analysis process. Based on the principles of Grounded Theory, data analysis was conducted iteratively using the three-phase coding strategy (Creswell, 1998), namely open, axial and selective coding. The analysis led to the generation of two major themes identifying the human relational and the non-human-relational factors affecting the implementation and institutionalisation of the SS project.

In the first phase, questions were asked about the general issues affecting the SS project. The preliminary analysis highlighted that the matters of power relations and

politics played an important role in affecting the implementation and institutionalisation of the system, and interestingly, these power relational behaviours appeared to be highly associated with how people categorised themselves and others into groups. This initial finding reflected the potential explanatory value of Turner's theory for the phenomena that occurred in the case study.

The second phase involved a second period of data collection and analysis aimed specifically at applying Turner's theoretical lens to explore the factors that affected the project progress. The subsequent data analysis highlighted that the human relational issues, comprising both the stakeholder relationships and the intra-project team relationships, were more significant than the non-human-relational issues in affecting the project progress. It was found that while Turner's Three-Process Theory of Power provided a useful theoretical lens to investigate and explain the power related activities in the SS project, a more thorough understanding might come when this theory was combined with aspects of other social theories in relation to power. The further interpretation of the data led to an augmented Three-Process Theory of Power.

1.7. RESEARCH CONTRIBUTIONS

This research project has made a number of contributions to IS knowledge and the research community at three levels: theoretical, methodological and practical.

At a theoretical level this research has built a deeper theoretical understanding of power relations in IT projects by investigating not only the relations between project stakeholder groups, but also the intra-project team relations. By introducing a useful social psychological framework (i.e. Turner's (2005) Three-Process Theory of Power based on the social identity approach (Tajfel and Turner, 1979, Turner et al., 1987)) to the IS discipline, and associating this framework with the traditional theoretical views of power, this research contributes to the IS discipline and other social science disciplines by increasing the understanding of power and power relations. This research also contributes to Turner's theory itself. In the extended Three-Process Theory of Power, the alternative determinants of power together with the extended

power-resource explanation, contribute to the understanding of social categorisation and power relations, and to the prediction of behaviours, thereby improving the explanatory power of the theory.

At a methodological level, in contrast to the other social science research using this theory that is commonly conducted by psychological experiments which tend to provide ready-made and post hoc findings (Wenzel and Jobling, 2006, Willis et al., 2010, Fritsche et al., 2013), the interpretivistic case study approach contributes to Turner's theory by applying it in a real-world case study involving complex human relations and consequences of decision making. Another methodological contribution is the illustration of how to cope with the difficulties and challenges with applying Turner's theory, since this theoretical lens is relatively new and few similar studies exist. In this way, other researchers can read of an example that may be similar to their own and therefore guide their work.

At a practical level this research adds to the knowledge area concerning the effective management of power relations in IT projects. Specific guidelines for IT project managers or systems implementers are provided, including the do's and don'ts of project managers' ways to overcome political and non-political issues in IT projects. These recommendations will indicate to IS theoreticians and practitioners what constitutes effective and ethical management of power relations and what non-human-relational aspects will require attention in setting up and managing IT projects.

1.8. RESEARCH LIMITATIONS

The limitations of this research concern the following aspects:

- the scope of the research, because conducting a single case study in itself is a limitation of the research and in this light the findings could be limited by focusing on one organisation and a certain era in time;
- the sensitivity of the research topic, which led to difficulties in relation to the data collection aspect of the research and the researcher had to be more vague

about the details of the participants and events than the researcher would have preferred;

- the researcher bias, because interpretive research by its nature requires the researcher's subjective understanding and interpretation of the phenomena but a number of tactics have been employed in order to minimise the researcher's bias and influences that will be specified in Section 6.4.3; and
- the lack of generalisability, because it is difficult to generalise the research results of a single case study, at least not in the scientific or positivistic sense, due to the nature of interpretive research (Benbasat et al., 1987, Yin, 1989, Yin, 2014); however, this research has provided details of the contextual information and the participants' interpretations in order to generate transferrable results so that similar patterns of behaviours can be learned (Lincoln and Guba, 1985, Guba and Lincoln, 1989).

Overall, in order to establish the rigour and trustworthiness of the research process and findings, this research has drawn on Klein and Myers' (1999) set of principles as the evaluation method. The application of Klein and Myers' evaluation criteria, together with the Grounded Theory based iterative data analysis, helped minimise the potential bias and limitations on this research.

1.9. THESIS MAP

This section provides a brief description of the layout of the thesis. The remaining chapters have the following structure.

1.9.1. Chapter 2 Literature Review

Chapter 2 reviews the core literature concerning power relations in IS implementation projects. After discussing the key aspects in IT projects that may affect dynamic processes of power relations, this chapter provides a critical review that is effectively organised by a conceptual framework focusing on the three major aspects of intra-organisational power; namely a) the bases or sources of power, b) the processes and

structures of power, and c) the personal characteristics and skills, capabilities and tactics relevant to the application of power. This conceptual framework reviews the IS research on power relations in IS implementations that bases its theoretical analysis on the major social theorists with an interest in power in organisations, namely Foucault (1979, 1980), Lukes (1974, 2005), Giddens (1984), Clegg (1989a) and Latour (1986).

This chapter then describes and analyses a new theory that balances a strong theoretical foundation with a focus on the pragmatic and tangible features of power-related behaviours. Specifically, the Three-Process Theory of Power of the social psychologist, John Turner (2005) based on Social Identity Theory (SIT) and Self-Categorisation Theory (SCT) is presented as a reference theory for IS researchers interested in the area of power relations.

1.9.2. Chapter 3 Research Design and Methodology

Chapter 3 provides a description of the research design and methodology used for this research. This research was approved by the Human Research Ethics Committee (HREC) Tasmania (Ethics Reference Number: H0012221). This chapter starts with a review of the research objectives and a description of the background to the research case study, the SS implementation project in AsiaPac University. It is followed by a description of the philosophical stance adopted in the conduct of the research, the research design, and the methods and techniques employed for the data collection and analysis. Specifically, the chapter provides examples of the three-phase analytical coding process through which the major themes were generated. The chapter concludes by demonstrating how the research was evaluated to ensure the rigour and trustworthiness of the research process.

1.9.3. Chapter 4 Data Analysis and Findings

Chapter 4 presents the initial findings generated from the in-depth data analysis process. The data analysis was conducted using an inductive three-phase coding strategy. Two major themes have been identified. All of the axial codes that are

relevant to each theme or sub-theme are described with extracts from the interviews. The relationships between the categories and sub-themes are also identified.

1.9.4. Chapter 5 Interpretation and Discussion

Chapter 5 further explores and interprets the findings presented in Chapter 4. Before further interpretation, the overarching research question and subsidiary research questions are reintroduced and the initial findings from Chapter 4 are summarised. The discussion and further interpretation of the findings are presented in relation to the surrounding literature. Specifically, this is achieved by demonstrating the principles of the applied theory in explanation for the phenomena and episodes in the case study data. While the application of Turner's theory has been found to be useful for explaining most phenomena in the case study, some incidences are difficult to interpret by solely using Turner's theory. This gap is addressed and filled by combining Turner's theory with the work of other social theorists on power. Through demonstrating the theoretical principles, the chapter answers each subsidiary research question, and finally the overarching research question.

The chapter concludes with an augmented Three-Process Theory of Power. This is achieved by extending Turner's theory with the alternative factors that emerged to be associated with the nature and the operation of power. In doing so, a more thorough understanding of power and power relations can be gained by combining Turner's theory with particular aspects of the other existing social theories of power.

1.9.5. Chapter 6 Conclusion

The final chapter provides a brief summary of the research processes that were presented in Chapter 2 and Chapter 3, and the findings that were presented in Chapter 4 and Chapter 5. The contributions of knowledge to the IS discipline that this research has made are discussed at the theoretical, methodological, and practical level. The chapter then presents the limitations of the research and the suggested potential areas for future research.

1.10. CHAPTER SUMMARY

To summarise, this chapter has provided the reader with an introduction and background to the research questions and the motivation for this research project. The research problems have been identified together with the research objectives and research questions, within the context of an IS implementation project. The chapter then provides a brief discussion of the research contributions and limitations, and concludes by providing a 'road map' for the remaining chapters of the thesis.

CHAPTER TWO

LITERATURE REVIEW

2. CHAPTER TWO – LITERATURE REVIEW

2.1. INTRODUCTION

This chapter provides a review of the literature attempting to relate the theories to the research context, specifically, the theories of power to the context of Information Technology (IT) projects. Figure 2.1 presents the literature review structure diagram, which identifies the four major bodies of literature that guide the current research. The final product of the literature review is an effective theoretical lens through which Turner's theory based on Social Identity Theory (SIT) and Self-Categorisation Theory (SCT) is used with a combination of other theories of power. This theoretical lens will then be applied within the research context of a complex Information Systems (IS) implementation project, also called an IT project.

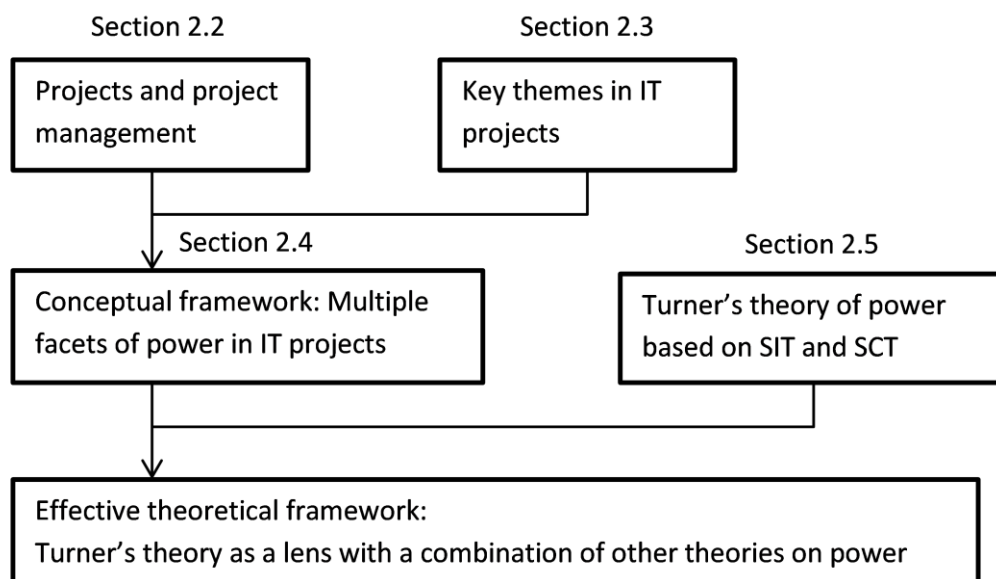


Figure 2.1 Structure of literature review

This chapter is divided into the following sections:

- Section 2.2 outlines the perspectives in the IS discipline on projects and project management, and then in particular, IT projects and IT project management.
- Section 2.3 summarises the key themes or concepts in IT projects that may affect dynamic processes of power relations.
- Section 2.4 provides a review of the IS literature on power relations in IT projects. The review is effectively organised by a conceptual framework that focuses on the three aspects of intra-organisational power; namely a) the bases or sources of power, b) the processes and structures of power, and c) the personal characteristics and skills, capabilities and tactics relevant to the application of power.
- Section 2.5 introduces Turner's Three-Process Theory of Power as a new research direction. The Social Identity Theory and Self-Categorisation Theory that Turner's theory of power is based on are also introduced and discussed in detail. Five key principles of Turner's theory of power are summarised. These principles constitute the theoretical lens that is used throughout the research process.

2.2. PROJECTS AND PROJECT MANAGEMENT

The current research attempts to investigate power relations in IT projects. Thus this section will first review the literature on projects and project management. Since the research context for this study is an IT project, the focus will be further drawn on IT projects and IT project management.

2.2.1. Projects and Project Management

With its rapid growth in recent decades, projects become essential components in organisational life. A project was defined as “a temporary endeavour undertaken to create a unique product, service or result” (Project Management Institute, 1996, p. 4). Morris (2006) emphasises the importance of projects, identifying projects as established methods which have effects on capital investment, new product development, and organisational change. Projects can offer instrumental rationality with reflective social knowledge imbedded, so that their goals can be achieved as efficiently and effectively as possible. The task-specific and time-limited form of work differentiates projects from other operational work, and the project management discipline serves to achieve stated goals more efficiently. When compared with ‘ordinary’ ongoing work, project work is not only positively described as challenging, creative, and stimulating, but also negatively described as controversial, disciplining, and sources of conflicts and internal politics (Lindgren and Packendorff, 2006). The temporary nature of a project makes it a set of time-limited and goal-focused sequences of action. With these characteristics, projects often bring organisational changes in terms of power relations.

Managing a project entails planning work in measurable tasks and tracking effort against outcomes (Thomas, 2006). A commonly accepted definition of project management is “the application of knowledge, skills, tools, and techniques to project activities to meet project requirements” (Schwalbe, 2008, p. 7). Project management appeared as a social practice in the post-second World War development of technology and infrastructure (Cicmil and Hodgson, 2006). Project management

became popular in management literature in the late 1950s and developed rapidly in the late 1960s and early 1970s. Through planning and controlling variables including resources, cost, productivity, schedule, risk, and quality, project management is expected to make sure delivering one-off undertakings within time, budget and scope (Hodgson, 2002).

Thus project management is significantly important and indispensable in improving organisational performance. Hodgson (2002) highlights the importance of project management for the future performance of organisations as a whole. In his study, a senior manager in a major bank in the UK defined project management as the first critical success factor in the bank's strategy. Hodgson (2004), in his later work, also notes that there was a rapid expansion for project management with the issues of change, knowledge management, and constant innovation in popular management discourse in the last decade. The next section turns its focus on IT projects and IT project management in particular, which are more relevant to the current research.

2.2.2. IT Projects and IT Project Management

With the rapid development of IT in today's organisational life, IT projects are widely embedded. IT project management has been a popular topic in the discourse of organisational management (Boonstra, 2013, Morris, 1997, Heracleous and Barrett, 2001, Avison and Torkzadeh, 2008). IT project management, also known as software project management, is defined as "the process of planning, organising, staffing, monitoring, controlling and leading a software project" (IEEE Standards Board, 1987 , p. 10). In contrast to non-IT projects, IT projects involve "using hardware, software, and/or networks to create a product, service, or result" (Schwalbe, 2009, p. 2). Like all forms of projects, IT-based projects have a temporary nature, involve teamwork, and focus on specific scheduled tasks to be completed within time, budget, and performance standards. An IT project can be small or large, and involves either one person or thousands of people. For example, a small IT project can be a technician replacing ten laptops for a small department; a bigger IT project can be a new system being implemented within a company to improve sales productivity and customer relationship management (Schwalbe, 2009).

The importance of IT projects is getting much attention in multiple contexts, one of which is higher education institutions (Allen et al., 2002, Silva and Fulk, 2012, Weller, 2009). The implementation of complex integrated information systems continues to be a priority for large business organisations as they seek efficiencies and better support for strategy implementation through the deployment of IT. Higher education institutions have various large stakeholder groups and a relatively more participative organisational culture compared to private business companies, which therefore often offer a rich environment for understanding power relations (Allen et al., 2002, Silva and Fulk, 2012). The current research is based on the analysis of the situations in a large-scale IT project in a university. Despite being smaller than some international-scale IT projects (e.g. Nishinaka et al., 2015), the project that is studied in the current research is seen as complex and large-scale because of its coverage, timespan, and budget overruns. The richness of the environment provided a great context for studying power relationships. The details of the research context will be introduced in Section 3.3.

It is also worth noting that there are different types of IT projects, and that they may vary in nature. Among the various types of IT projects, software development and system implementation projects play a critical role (Heiskanen and Newman, 2008, Dhillon, 2004). Software development projects tend to focus on methodology used (e.g. conventional waterfall or Agile depending on the scale of the project), progress against schedules and budgets, and system quality, while system implementation projects are more concerned about a high quality 'change' outcome in relation to user satisfaction, system use and benefits of use (de Waal and Batenburg, 2014). As discussed in Section 1.2, an IS implementation type of IT project involves organisational power relational activities between a wider range of stakeholders compared to a software development project. In the current research, the system that the university adopted was an off-the-shelf product and hence the IT project that was studied in the current research was effectively a system implementation project.

Despite significant research, and many books and research papers offering prolific advice on the issues involved (Seddon et al., 2010, Keil and Mahring, 2010, Iacovou et

al., 2009, Avison and Torkzadeh, 2008), IT project management is a task with many challenges. Indeed, a large number of IT projects fail to meet their objectives, and some fail disastrously (Standish Group, 2004). The research into IT project management has identified many critical success factors along with corresponding reasons for failure (Flowers, 1997, Kappelman et al., 2006, Oz and Sosik, 2000). The factors identified as being implicated in IT project failure include a lack of top management commitment to the project, lack of corporate leadership (including a weak project champion), inadequate information requirements determination, communication issues, organisational politics, lack of user involvement and participation, and change management problems generally (Liebowitz, 1999, Oz and Sosik, 2000, Kappelman et al., 2006, Grainger et al., 2009). The fact that organisational politics, participation and corporate leadership issues are among the reasons for failure indicates that power and power relations can be important elements in IT project management. Indeed, power has been explicitly mentioned as a factor of interest and influence regarding project success/failure (Iacovou et al., 2009, Smith and Keil, 2003). Keen (1981, pp. 31-32) emphasises the importance of studying power in IT projects, and in his words:

“A political perspective on information systems is needed in research. It will of necessity be based on comparative field studies that illustrate theoretical concepts ... It can immensely add to our understanding both of the implications of information technology and the dynamics of effective implementation”.

Given these indications of the importance of power relations to IT project management, the current research adopts a political focus in studying a large IS implementation project, particularly on power relations and resistance behaviours. To shed light on this focus, key variables in IT projects will be considered and discussed in the following section.

2.3. KEY THEMES IN IT PROJECTS

Concerning the concept of power in IT projects, there are several key themes that can affect the dynamic processes of power relations and the context in which the changes take place. In particular, the themes discussed here include a) power-resistance relationship, b) communication, c) participation, and d) articulating/building a vision for change (see Figure 2.2). Rather than only looking at one general theme, this section makes it possible to draw out a set of themes, problems, and questions in the literature leading towards the current research focus. These four themes are selected as they have frequently emerged within the literature concerning IT related organisational change (e.g. José-Rodrigo, 2007, Burn and Robins, 2003, Ngwenyama and Nielsen, 2014, Butler and Fitzgerald, 2001). These themes also appear to have salient features that align with Turner's theory and/or other IS traditional theories. For example, Turner's (2005) articulation of psychological group formation seems to provide a useful approach for understanding power dynamics and organisational change. The following sub sections will discuss each theme in detail.

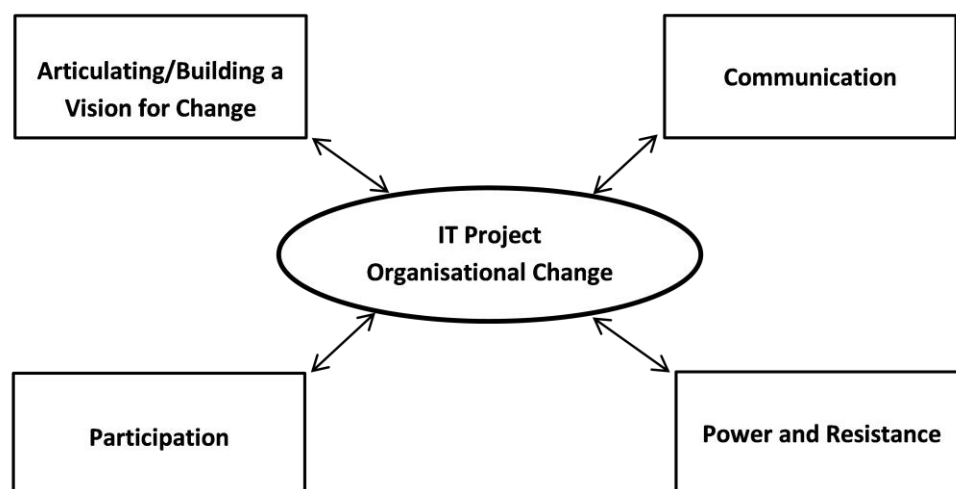


Figure 2.2 Key themes in IT projects

2.3.1. Articulating/Building a Vision for Change

IT projects inevitably involve organisational change and thus the mix of power dynamics and organisational change is important. The relationship between power dynamics and organisational change has been an area of concern in organisational

studies (Bradshaw-Camball and Murray, 1991, Bradshaw, 1998, Gravenhorst and Boonstra, 1998, Munduate and Gravenhorst, 2003, Boonstra and Gravenhorst, 1998, Hardy and Clegg, 2004, Hardy, 1996). Therefore, articulating and building a vision for change is an important theme in understanding power relations in IT projects. In order to understand the role of power dynamics in organisational change, the nature and social context of the organisation, the organisational change processes, and the roles played by the change agents are the relevant properties for analysis (Munduate and Gravenhorst, 2003).

Turner (2005) articulates a vision for social change with power and influence dynamics through explaining the formation of psychological groups based on perceived social identities. In contrast to traditional theories sharing the views that power flows from control of resources (Deutsch and Gerard, 1955, Festinger, 1950, French and Raven, 1959, Kelman, 1958), Turner's theory, together with SIT and SCT, seems to give a more convincing explanation of such phenomenon as power dynamics in social and organisational change. This thesis will first introduce the organisational culture and the roles that the change agents played in the case study project, and then explain the organisational change processes through understanding power dynamics that took place. The advantages and disadvantages of the resource dependency view of power and Turner's theory of power will be further discussed in Section 2.5.

2.3.2. Communication

Communication and organisational discourse have been acknowledged as important themes by organisational and IS scholars in exploring organisational change processes (de Carvalho, 2014, Oz and Sosik, 2000, Lewis, 2006, Lewis and Seibold, 1998, Hardy, 2001, Heracleous and Barrett, 2001). A number of these studies have focused their attention on the ways that communication may affect the processes of IS implementations (Lewis, 2006, Oz and Sosik, 2000, Heracleous and Barrett, 2001). As Lewis and Seibold (1998) note, communication is inherently one part of implementation activities, including the announcement of change programs, user training, and users' interaction and feedback.

Critical theorists view IT projects as unavoidably threatened by distorted discourse and communication due to the technocracy and asymmetrical relations of power (Alvesson and Deetz, 2005, Alvesson and Deetz, 2000). From the perspective of Critical Theory, introducing new system and new technology into an organisation empowers the group of technical experts. Particularly, due to the terminology barrier between technical and non-technical people (Foucault, 1977), communication related issues are deemed to occur during the implementation and institutionalisation of a new technology (Alvesson and Willmott, 1996, Valerie and Chris, 2000). While communication is an important factor determining the success or failure of IS implementation, the empirical research focusing on communication in IS implementation is still insufficient (Oz and Sosik, 2000, Lewis, 2006).

From an interpretive perspective of power, whoever controls organisational discourse and dialog determines organisational outcomes (Jasperson et al., 2002). Organisational context and culture can shape and be shaped by day-to-day communicative activities in which power relations are the result of ongoing discursive struggles whereby meanings are shared and negotiated (Hardy, 2001). Mumby and Clair (1997) emphasise that organisations are sites of struggle where different groups compete to shape the social reality of organisations in order to serve their own interests. In this light, the current research will draw upon organisational background discourse and communications that may effectively shape power relations between different psychological groups during an organisational change.

2.3.3. Participation

Participation is another common theme examined in IS implementation processes (Heller, 2003, Markus and Mao, 2004, Pasmore and Fagans, 1992, Butler and Fitzgerald, 2001, Devine, 2010, Weller, 2009, Thomas, 1989). An example is Butler and Fitzgerald's (2001) case study of the relationship between user participation and organisational change in the development and implementation of an information system in a large organisation, which illustrates the dominant role of the organisational context in shaping the process of user participation and the management of change in the system development.

Traditional IS participation theory emphasises the link between user participation (also known as user involvement) and the system success, concerning the effective application of power (Heller, 2003, Markus and Mao, 2004). Thus the participative approach may impact the way that power relations play out. Participation is viewed as a means of moving from passive actions to active actions, from dependence to independence, and from a position of subordinancy to equality, and to gain autonomy over one's behaviour (Pasmore and Fagans, 1992). These changes could close the gap between individual needs and organisational experiences, leading to greater self-actualisation and better organisational performance (Pasmore and Fagans, 1992). The participative actions allow power and influence to be distributed within organisations. Although the term participation is frequently mentioned in organisational studies, most of the literature is narrowly focused, especially in relevance to power and influence (Heller, 2003). Noting that the concept of participation shares similarity with the social influence and persuasion in Turner's (2005) terminology, the current research seeks to investigate participative activities and approaches, and their role in shaping power relations and influencing effective management of IS implementations.

2.3.4. Power and Resistance

The power-resistance relationship has been largely examined by IS researchers regarding organisational change (Ashforth and Mael, 1998, Clegg, 1994, Markus, 1983, Mumby, 2005, Thomas and Hardy, 2011, Thomas et al., 2011, van Dijk and van Dick, 2009, Knights and Vurdudakis, 1994, Courpasson et al., 2010, Courpasson and Dany, 2009). Thomas and Hardy (2011), drawing on the insights from Foucault's (1979, 1980) work, argue that organisational change is the outcome of dynamic relations between power and resistance, and emphasise how relations of power and resistance operate together in ways that are constitutive of change. Power and resistance are two mutually reinforcing elements in a dynamic relationship in organisations and their relations are co-constitutive, diffuse, and multidimensional (Thomas et al., 2011). Indeed, any act of resistance is an exercise of power, and power is involved when action is taken to prevent resistance (Knights and Vurdudakis, 1994).

Not only 'overt resistance' is extensively discussed in IS and organisational management (Ford et al., 2008, Davidson, 1994, Lapointe and Rivard, 2005, Courpasson and Dany, 2009), but 'covert resistance' also draws much attention from IS researchers (Pushkala and Anshuman, 2000, Mumby, 2005, Gottfried, 1994, Rusaw, 2000, Lapointe and Rivard, 2005, Courpasson and Dany, 2009). Pushkala and Anshuman (2000), for example, draw much interest on the elusive and troubling kind of resistance which is more difficult to examine given its hidden nature. In organisational changes, resistance is often viewed negatively as a mulish force of change recipients which change agents seek to eliminate and minimise (Hardy and Clegg, 2004, Giangreco and Peccei, 2005, Thomas and Hardy, 2011). However, some literature identifies the positive perspective of resistance, which can be seen as a facilitative resource assisting organisational change (Thomas and Hardy, 2011, Thomas et al., 2011, Ford et al., 2008, Ashforth and Mael, 1998, Markus, 1983). Markus (1983), drawing on the interaction theory that focuses on resistance derived from interaction between people and system characteristics, argues that resistance can be either destructive or functional for organisations, depending on how people align themselves with the interests of either party. The concern with resistance and change from the viewpoint of social identity (Tajfel et al., 1971, Tajfel and Turner, 1986), noted by Reicher (2004), is to emphasise human responsibility in shaping and reshaping social relations rather than claiming them as the results of domination. In this light, resistance can facilitate the occurrence of change.

The roles of power and resistance in IS implementations have been largely focused on by IS researchers and practitioners (Doolin, 2004, Markus, 1983, Bartos et al., 2011, Celia and Nava, 1997, Dawson and McLoughlin, 1986, Clemons and Row, 1993, Cavaye and Christiansen, 1996, Burkhardt and Brass, 1990, van Dijk and van Dick, 2009, Lapointe and Rivard, 2005, Allen and Kern, 2001). For example, Markus (1983) applies a framework of three basis theories of resistance in a case study of a financial information system in a large manufacturing firm. In this study, the author seeks to help system analysts/developers prevent resistance from happening, and help management implementers of the system to deal with resistance that has already occurred.

The social identity perspective sees resistance to change as a phenomenon of power (Reicher, 2004). van Dijk and van Dick (2009) conducted their study using a multiple case study design with both qualitative and quantitative methods in order to understand the motivations behind employee resistance and the way it is managed by change leaders. The findings revealed that employees' resistance to change was the outcome of self-enhancement of their group identity as employees perceived they were being devalued or unvalued because of their salient group memberships rather than individual characteristics. As a result, the employees promoted their existing group identity, as opposed to the new group of the change leaders, seeking to reinforce their membership group norms and behaviours rather than adopting a new superordinate identity. In Three-Process Theory of Power, Turner (2005) also argues that resistance and reactance can be provoked and triggered when coercion is exercised between psychological groups. This concept will be further discussed as one principle of Turner's theory in Section 2.5.

Based on the discussion above, the power-resistance relationship is underlined as one key theme in IT projects, and the way in which resistance is explained by adopting the social identity proposition seems to offer a useful perspective (Reicher, 2004). In the current research, both power and resistance behaviours were explored. By adopting Turner's (2005) theory to explain the phenomena of power and resistance, this research study seeks to determine how power and resistance may affect each other, and operate together, to facilitate or inhibit the organisational change of IS implementation.

2.4. CONCEPTUAL FRAMEWORK: MULTIPLE FACETS OF POWER IN IT PROJECTS

This section provides a critical review of the IS research on power relations in IS implementations by organising the literature into a conceptual framework concerning multiple facets of power in IT projects. The extensive review of power in IS research by Jaspersen et al. (2002) is significantly comprehensive. While it covers considerable aspects of power and IT through seven lenses with a meta-triangulation approach, the

review is somewhat bewildering in its coverage and complexity. Further, the review does not include publications post-2002; more specifically, this review only focuses on journals published between 1980 and 1999. Nevertheless, some of the post-1999 publications have been considerably insightful and important in contributing to the knowledge of power relations in IS implementations (Silva and Backhouse, 2003, Dhillon, 2004, Howcroft and Light, 2006, Smith et al., 2010, Dhillon et al., 2011).

In order to produce a manageable and coherent set of themes and ideas with which to base the IS research in this area going forward (rather than being an exhaustive and taxonomic style review), this section is focused specifically on research into power relations in IT projects that bases its theoretical analysis on the major social theorists with an interest in power in organisations. These theorists include Foucault (1979, 1980), Lukes (1974, 2005), Giddens (1984), Clegg (1989a) and Latour (1986). Such a focus means that consideration is given to ideas of significant theoretical depth and power, and not to ad hoc frameworks that may lead to a superficial analysis. Building on the issues, problems and gaps in this segment of the IS research literature, Turner's (2005) theory as a new theory to IS will then be introduced to provide opportunities for further research in this arena, and it is presented as a reference theory for IS researchers interested in the area of power relations.

In order to organise the literature review of power in IT projects, particularly the literature drawn on the work of Foucault, Lukes, Giddens, Clegg and Latour, a theoretical framework is devised as shown in Figure 2.3. The literature on power relations in IT projects can be effectively organised via the framework's focus on the three aspects of intra-organisational power. These include (a) the bases or sources of power, (b) the processes and structures of power, and (c) the personal characteristics and skills, capabilities and tactics relevant to the application of power. In the IS discipline, the major focus of research on power has been drawn on the processes and structures. However, the origins of power (French and Raven, 1959, Foucault, 1980), as well as individual characteristics and the ability to influence others (Yukl et al., 1993, Yukl and Falbe, 1990) could also be critical aspects of power relations, which have been somewhat neglected in the academic literature to date.

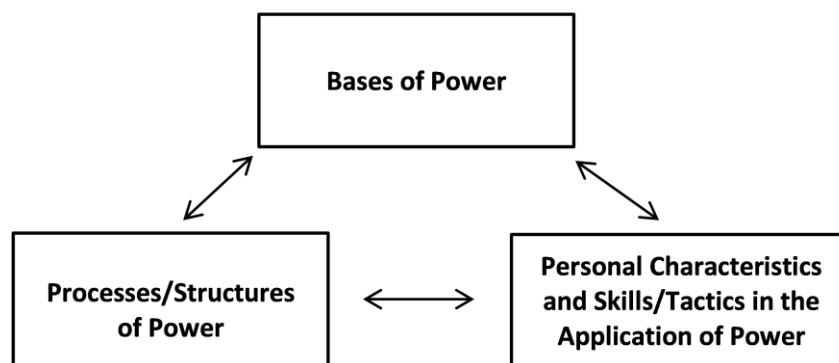


Figure 2.3 Multiple facets of power in IT projects

2.4.1. IT Projects Research and the Bases of Power

More than five decades ago, French and Raven (1959) asserted that there were five bases or sources of power, namely, reward power, coercive power, legitimate power, referent power and expert power. Reward power is the ability to mediate rewards, while coercive power is the ability to manipulate threaten and punish. Legitimate power, based on which Turner (1991b) explains as authority, refers to people's perception that someone has a legitimate right or authority to influence and it is their obligation to accept the influence. Referent power, which is similar to the social identity basis of Turner's theory (2005), refers to a desire of belongingness. That is, people tend to be influenced by someone or some group who are similar to them in their attitudes and beliefs. Expert power, based on the 'informational power', occurs when people believe that someone knows and is telling the truth. Although these bases of power have been studied and critiqued in organisation science and other literature (Podsakoff and Schriesheim, 1985, Gupta and Sharma, 2008, Bachman et al., 1968, Thamhain and Gemmill, 1974, Student, 1968, Marshall, 2006), there has been no study of this set of sources of power in IT project research. Nonetheless, some IS-based studies, while basing their research on other theories, have referenced the French and Raven (1959) taxonomy (Smith et al., 2010, Chu and Smithson, 2007).

Of the IS research studies concerning power relations in IT projects, those based on the writings of Michel Foucault (1998, 1977, 1980) give a clear location for the source of

power. The basis or source of power, as indicated in the writings of Foucault (1998, 1980), is argued to be located, not in leaders or persons in authority, but in the web of social relations and structures existing in society, institutions, and in organisations (Hardy and Philips, 2004). Foucault (1977) notes that for contemporary societies, control by authorities has moved from the primitive methods of the threat or actuality of torture and physical violence, to more psychological methods as societies develop a network of distributed disciplinary apparatuses in prisons, military, and paramilitary organisations, schools, factories, and offices (Townley, 1993, Berente et al., 2010).

In such organisations, Foucault (1977) argues, people are controlled by a system of control over their bodies, and to an extent, their minds. The time and location of activities is controlled, as persons are required to be located at the factory workbench or machine workstation, the school desk, the office workstation, and so on for prescribed times. Permitted activities and even specific actions over time are prescribed by industrial engineers, time and motion experts, or business process management specialists. Thus standardised organisational processes or routines ceaselessly discipline the members of such organisations as these activities are scrutinised, measured and evaluated by supervisory authorities.

Training and constant supervision and guidance by supervisory authorities via observation and/or software inculcates a discipline that perseveres beyond the constant gaze of supervisors, as individuals begin to impose self-discipline. In order to impose such discipline, the relevant authorities have to have knowledge of the situation or arena of control. Thus Foucault (1980) sees knowledge, not in terms of truth and falsity, but in terms of enabling disciplinary power. Indeed, in a play on words, Foucault (1977) uses the word 'discipline' in two ways; as a disciplinary body of knowledge and as a synonym for control. Thus, for example, the 'discipline' of project management is at once a body of knowledge, but is also a discipline in the control and power sense (Hodgson, 2002). The terminology of the project management discipline and the language of project management, together with the structures and processes of project management, give a framework that guides, directs and disciplines the

activities of both project management practitioners and project participants and allows performance to be evaluated and scrutinised (Hodgson, 2002).

A number of IS research papers on power relations in IT projects have used Foucault's perspective on the source and nature of power as a basis for theoretical analysis (Doolin, 2002, Doolin, 1999, Doolin, 2004, Berente et al., 2010, Ball and Wilson, 2000, Elmes et al., 2005, Peszynski and Corbitt, 2006). Doolin (2004) gives a Foucauldian analysis of a New Zealand hospital 'case-mix' system, implemented at the behest of hospital management. The system sought to monitor, scrutinise, cost and report on clinical activity in the hospital, thus bringing about more resource-aware and cost-conscious behaviour among physicians. This made clinical activity of various kinds, and hence physicians' work performance, more visible and comparable, or in Doolin's words, more 'calculable'. However, the physicians were able to mount a successful resistance to the system, and eventually the system collapsed into a minor role in the hospital. The implication of Doolin's (2004) study seems to be that whenever power relations are embedded in a social setting in such a way that user groups have significant social influence, then for an information system to be successfully implemented, either the social context and culture needs to be changed first, or there needs to be negotiation regarding the system with the powerful group or groups. Neither of these actions were taken at the New Zealand hospital concern, and hence the system failed. The importance of understanding power relations in such projects is underlined by Doolin's case study.

Berente et al. (2010) also based their analysis of an Enterprise Resource Planning (ERP) system implementation on Foucault's theory of power, discipline and control, and their study further contributes to the general understanding of power relations in IS implementation projects. An ERP system provides, the authors find, an excellent platform for management to exert some necessary controls that contribute towards organisational productivity, but also find that some elements of the implementation were geared towards control for control sake, contributing little or nothing to organisational productivity. Berente et al. (2010) term this latter phenomenon 'dressage-as-control'. Practitioners are advised by the authors to avoid such actions,

particularly as the practice generates time-wasting and meaningless counterfeit compliance, which the authors call 'dressage-as-response' (Berente et al., 2010).

Ball and Wilson (2000) used Foucault's perspective on power to analyse computer-based performance monitoring in two UK financial services firms, namely a building society and bank. Both cases revealed the close interrelationship between the application of disciplinary power and the framing of resistance. In both cases, there was intense and close computer measurement of work activity and work rates in financial services work, possibly to an extent that could have been regarded as oppressive. In the building society, however, feedback on the performance numbers observed tended to be constructive, and there was a general empowerment element to performance management, including coaching to improve performance. However, in the bank case, there was a highly autocratic approach to dealing with the management of the measured performance, and in this case, stress, unhappiness and resistance are all more marked among the employees under surveillance.

Drawing from Foucault's thinking on power, another significant theorist who has written on the bases of power is Stephen Lukes (1974) whose best-known theory is the 'Three Dimensions of Power'. This theory asserts that social and/or organisational control is achieved in three ways: through decision-making power, non-decision-making power and ideological power. The first dimension concerns power in the decision-making process, where the powerful are those who are able to influence the decision-making process to obtain the outcomes they want. In this dimension of power, control of resources is illustrated as the prime basis of power (Dhillon, 2004, Lovell, 1993). The second dimension focuses on the non-decision-making process where the powerful are able to use mechanisms to squeeze people out and confine decision-making to safe issues, and thus control over agenda for decision-making is key. The third dimension concerns power being used not only to prevent issues from entering decision-making process but also to prevent issues from arising at all by shaping people's perceptions and preferences in such a way that they accept their role in the existing order. Thus in this way, power is most effective when it is unnecessary.

Although Lukes' Three Dimensions of Power have been largely reviewed, critiqued, and developed in multiple disciplines (Hardy, 1996, Howcroft and Light, 2006, Markus and Bjorn-Andersen, 1987), there is only one study that adopts Lukes' Three Dimensions of Power model as a lens to investigate power in the context of an IS implementation project. This study was a longitudinal study conducted by Howcroft and Light (2006) concerning the adoption of a customer relationship management package in a small organisation. The study applied a framework developed by Markus and Bjorn-Andersen (1987), who draw on the work of Lukes to investigate the exercise of power by systems professionals over users. The three dimensions of power have been examined to highlight both overt and covert power issues within the selection and procurement of the product and illustrate the interplay of power between senior management, IT managers, IT vendors and consultants and end-users. The research illustrates how in-house IT professionals may no longer only be required to be responsible for technical issues such as developing software, but are expected to negotiate with a range of stakeholders including IT consultants and internal financial decision-makers. Their study contributes to the understanding of how power is deeply embedded within the surrounding processes by adopting Lukes' Three Dimensions of Power model.

It is also worth noting that Hardy (1994, 1996) integrate Lukes' (1974) view of power into a four-dimensional model. The four dimensions include resources, processes, meanings and systems, among which the first three are aligned with Luke's three dimensions of power. Based on Foucault's (1979) conception of power, Hardy adds to Lukes' taxonomy with the fourth dimension of power that is termed 'system power'. The system power refers to the power that is often taken for granted because people unconsciously accept the values, cultures, traditions and structures of an organisational system (Hardy, 1996). By accepting the given network of social relations, people accept the way that things usually get done.

While Hardy's first three dimensions that are consistent with Lukes' power model are used in prior IS research (Dhillon, 2004, Howcroft and Light, 2006), only Dhillon and his colleagues (2011) applied the fourth dimension of Hardy's power model in a study of

power relations in IS implementation. Specifically, this study explored how intentions of the key stakeholders and organisational power coalitions shaped the ERP system implementation in the context of a European firm. It was found in the study that the implementation coincided with significant restructuring of power relations within the firm, and the realisation of an IS implementation would largely occur because of a collective consent where various stakeholders aligned their power and intentions.

The work of Lukes' (1974), as well as Hardy's (1994, 1996), is thus focused on power in decision-making processes, and hence relates more closely to matters of interest in IS implementation projects. However, their work does not give a clear analysis of the sources of power and thus omits a number of structural themes that can be utilised by practitioners in setting up IS implementation projects. Potential behaviours and covert latent conflict are key concepts in Lukes' perspectives of power (Clegg, 1989b). But the real issue is how one can determine and evaluate the action, practice and relations of such unknown themes in real social contexts. Thus more tangible themes are needed, such as persuasion and legitimate authority (Turner, 2005).

In each of the above analyses of IS research on the bases of power, one can gain an understanding of the complexity and interrelationships of power relations, resistance, and the success (or otherwise) of IS implementation projects. Overall, however, there is a lack of clear guidance for practitioners regarding particular practices to adopt, or policies to implement in order to successfully negotiate the complexities of power relations in such projects. Further, the analyses detailed above focus on the relations between management and the users of the systems and do not include an analysis of intra-project power relations between project team members. A more detailed analysis including the power relations within an IT project team would allow for the total picture of power relations to be conveyed.

2.4.2. Processes/Structures of Power

IS research that focus on the processes and structures through which power is exercised largely draw on the work of Giddens, Clegg and Latour, in particular Giddens' Structuration Theory (Hussain and Cornelius, 2009), Clegg's Circuits of Power model

(Silva and Backhouse, 2003, Smith et al., 2010) and Latour's Actor-Network Theory (Bloomfield et al., 1997, Bloomfield, 1991, Bloomfield, 1995). This section will first deal with Giddens' Structuration Theory and the IS research studies on power relations that utilise this theory, and then move on to consider Clegg's and Latour's theories.

Giddens' writings are focused on providing an ontology of human society, thus revealing and defining the major entities of the human social world (Craib, 1992). Thus Giddens' theoretical work deals with social phenomena at a high level of abstraction (Jones and Karsten, 2008, Macintosh and Scapens, 1990, Macintosh and Scapens, 1991, Layder, 1985). The central feature of Giddens' Structuration Theory is the balanced treatment of structure and agency, so that neither is taken as primal and fundamental, but rather both interact and impact the other. Human action is taken to be guided and influenced, but not completely determined by structures or defined patterns of behaviour (Jones and Karsten, 2008, Huang, 1997, Busco, 2009, Layder, 1985). On the other hand, structures or codes of practice, templates, rules and formulas can be altered, reshaped or even redefined by individual actions that differ somewhat from existing structures. This production and reproduction of structures through human action is often referred to as the duality of structure and action (Giddens, 1984). In a sense, structures only exist as memory traces in individuals, until they are instantiated by the actions of individuals. Thus actions or interactive behaviours and structures are mutually constitutive (Giddens, 1984, Macintosh and Scapens, 1990, Macintosh and Scapens, 1991, Layder, 1985).

Giddens identifies three dimensions of structure, namely signification, domination and legitimation (see Figure 2.4). These are related and interlinked with three corresponding dimensions of human interaction, namely communication, power and sanction. Each of the dimensions of interaction is shaped and guided by the corresponding structure, and is linked to the structure via the modalities or bridging mechanisms of interpretive schemes, facilities and norms as shown in Figure 2.4. To note that in human social life, the dimensions of structure and human interaction are intimately interrelated and interlinked: they are separated in Structuration Theory only

for analytic purposes (Giddens, 1984, Chu and Smithson, 2007, Hussain and Cornelius, 2009).

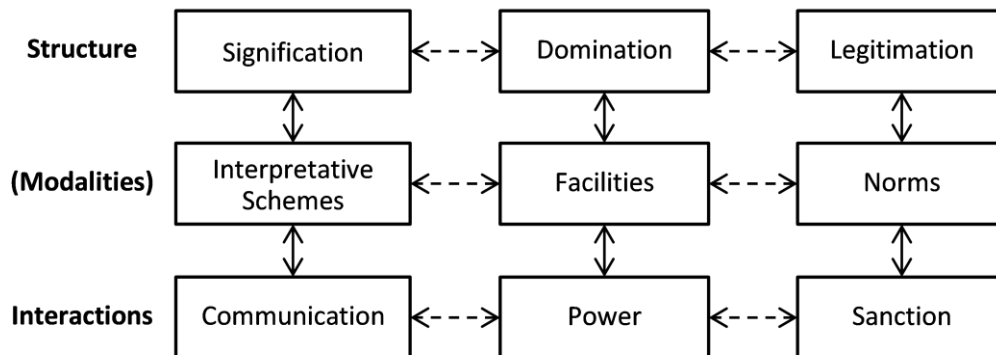


Figure 2.4 Dimensions of structures and interactions in Structuration Theory (adapted from Giddens, 1984)

Signification structures concern the making and sharing of meaning. As such, these structures consist of codes, templates, rules and formulas for the act of communicating. Actual communicative practices draw not only on the structures, but are informed by interpretive schemes which are stocks of shared knowledge and cognitive rules for making and sharing meaning. Legitimation structures consist of moral codes and rules that guide legitimate behaviours and reproduce and guide moral actions via sanctions. Legitimation structures and sanctions are mediated and informed by social norms. Domination structures guide and constrain the exercise of power. The enactment of behaviours involving power relations is not only guided by domination structures, but is mediated and enabled by facilities or resources. Such resources can be allocative resources that spring from command over material objects, or authoritative resources that involve the command and coordination of human actors (Macintosh and Scapens, 1990, Macintosh and Scapens, 1991, Huang, 1997).

Aside from specifics of domination structures, Giddens views power as ubiquitous, being present in all actions and in all social relations (Giddens, 1979, Giddens, 1984, Huang, 1997, Layder, 1985). Power, to Giddens, represents the transformative capacity to get things done and, as such, does not tend to be limited to its dark side of coercion,

bullying, oppression, and exploitation (Huang, 1997). Power is possessed, to some extent at least, by all social agents, wherever they are in the institutional or organisational hierarchy. Agents can, by definition, always do otherwise, yet are needed by those in senior positions in the hierarchy by reason of their energy to get things done and their knowledge of local processes and ways to do things. Giddens refers to this feature of power as the 'dialectic of control' (Huang, 1997, Giddens, 1979, Giddens, 1984). Structuration Theory provides a theoretical basis for many other social theories (Shanks et al., 1996 1238). Although Giddens (1984) did not refer to technology in the Constitution of Society, Walsham (2002) and Orlikowski (1992) provide the link of Structuration Theory to technology.

Despite a lot of studies being drawn from Giddens' Structuration Theory (Brooks, 1997, Chu and Smithson, 2007, Macintosh and Scapens, 1990), only two studies in the extant IS literature use Giddens' Structuration Theory as a theoretical lens to examine and make sense of power relations in an IS implementation project, namely, Hussain and Cornelius' (2009) study of the implementation of an intranet in a health care organisation in the UK and Spiegel et al.'s (2012) study of health information system implementations in Canada and South Africa.

Hussain and Cornelius identify episodes in the narrative of this case study that can be viewed as the enactment of domination and legitimation structures, thus explaining the progress and success of the project in terms of these notions. Outside the identification of these structures, however, there is little to indicate to theoreticians and practitioners what constitutes effective and ethical management of power relations in IS implementations. For example, in Hussain and Cornelius' study despite some passive resistance, it seems to be that the senior management and IT management were always able to produce and reproduce domination and legitimation structures by controlling resources to prevent and minimise any resistance to accept changes. There are no sufficient unanticipated difficulties in the case study to allow one to investigate how power relations can be dealt with effectively and ethically in overt political conflicts between different groups.

This weakness may be found within Spiegel et al.'s (2012) study. With the structurationist analysis of four case studies, Spiegel et al. emphasises the importance of power relations in IS implementation and suggests that the system to be implemented can be seen as a weapon that one can use to exert power over other agents. However, there is little practical advice provided of how to resolve the power relational issues or how to manage the power dynamics so as to facilitate the IS implementation. This may be due to the fact that Giddens' Structuration Theory is intended only as an abstract and broad theoretical framework within which other social theories can be developed (Shanks et al., 1996).

Turning now to the work of Clegg (1989a, 2006), there are several IS studies of power relations in IS implementation projects that use Clegg's Circuits of Power model (Smith et al., 2010, Backhouse et al., 2006, Silva and Backhouse, 2003, Silva and Fulk, 2012). However, before reviewing the studies, the basic nature and structure of Clegg's model will be reviewed. The model is centred around the metaphor of circuits in which power flows silently and invisibly as in electric circuits. There are three circuits, further discussed below: the episodic circuit of causal power, the circuit of social integration and the circuit of systemic integration. The three circuits represent highly interlinked dimensions or aspects of power (Clegg, 1989a, Clegg et al., 2006).

The episodic circuit of power is concerned with the exercise of causal power. Causal or sovereign power encompasses the traditional notion of power whereby power is a resource or commodity possessed by someone which enables them to direct, command or coerce others. Thus, in simple terms, an episode of causal power occurs when A directs or causes B to do something that otherwise B would not do (see bolded arrow in Figure 2.5) (Dahl, 1957). Whether this episode is successful in terms of A's design or intent is determined by the situation established by the other two circuits as indicated in Figure 2.5.

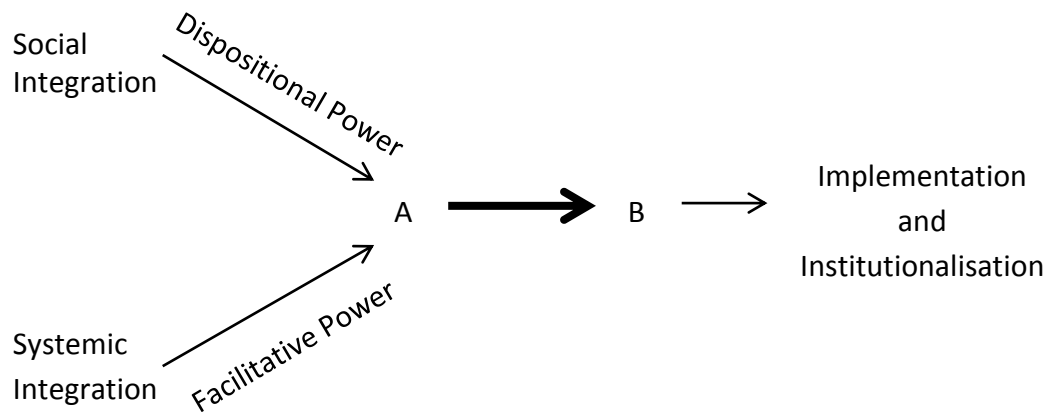


Figure 2.5 The circuits of power and its outcomes (adapted from Silva and Backhouse, 2003)

The circuit of social integration emphasises dispositional power (Clegg, 1989a, Clegg et al., 2006, Smith et al., 2010). Dispositional power is concerned with the establishment, configuration and maintenance of the ‘standing conditions’ of organisational actors. The standing conditions for actors are the positions they hold in the organisational structures and their access to the resources of the organisation (Clegg, 1989a, Silva and Backhouse, 2003). Thus dispositional power refers to the capacities of actors to make things happen. To understand dispositional power one needs to study the structures, rules and policies that create meaning in organisations and give membership to groups including project team, committees and the like (Backhouse et al., 2006, Smith et al., 2010).

Dispositional power does not only refer to formal organisational rules and structures but it also refers to the informal organisation of tacit understandings, conversations and discourses. Thus considerable analysis and interpretive effort is necessary to understand the operation of this circuit. Generally speaking the circuit is concerned with issues related to legitimation, authority and access to resources (Smith et al., 2010).

The circuit of systemic integration is concerned with facilitative power in organisations (Clegg, 1989a, Clegg et al., 2006, Davenport and Leitch, 2005). Whereas the causal

power of the episodic circuit concerns power as ‘power over’, facilitative power concerns ‘power to’ (Clegg, 1989a, Gohler, 2009). Facilitative power is thus a positive conception of power that is involved in the bending of wills so as to achieve collective goals.

Facilitative power is enacted or exercised through what Clegg (1989a) refers to as the techniques of production and discipline. Clegg uses the term ‘discipline’ in the Foucauldian sense which includes both rewards and sanctions and the techniques of supervision, surveillance, routinisation, formalisation, and mechanisation (Clegg, 1989a, Hodgson, 2002). Thus management’s techniques of motivation and control are relevant here, as are the associated IT-enabled systems of performance measurement (Silva and Backhouse, 2003). The techniques of production refer to the methods and technologies used to deliver the organisational output of goods and/or services. In this matter, as well as in the techniques of discipline, innovations that change or transform these techniques are of particular importance (Orssato and Clegg, 1999, Coopey et al., 1997).

There are four papers in the extant IS literature that are focused on power relations in IS implementation projects and that use Clegg’s Circuits of Power as a theoretical lens. In one such study, Silva and Backhouse (2003) present an in-depth longitudinal case study involving the implementation and institutionalisation of an administrative system in a central American research organisation. This study traces the power struggles and resistance associated with the implementation of the system, which was focused on disciplining the researchers to follow the monetary disbursement rules of an important external funding agency. As such, the system constituted an obligatory passage point for researchers requiring to expend money to progress their research projects. The episodic, social and systemic circuits were used in the analysis to reveal different perspectives on the power relations in the organisation as it undertook the implementation of this system. Without these different perspectives, the authors argue, an incomplete picture of power relations in the IT project concerned would result. The information system, the authors maintain, has to be integrated into the organisation at the three levels that correspond to the three circuits of power.

The papers by Backhouse et al (2006) and Smith et al (2010) are similar to the paper just discussed, except that the IS implementation studied in the research concerns, not an information system, but the formulation and implementation of a *de jure* information systems security standard. Further, the two studies involve, not just individual organisational actors, but private corporations and government departments and agencies as actors. Again, as in the paper reviewed above, episodes in the narrative of the cases are identified as events or situations pertaining to one or more of the circuits of power. However, it is worth noting that at times the analysis is abstract, opaque and difficult to interpret. As mentioned by Backhouse et al (2006, p. 429):

“Deploying these elements – the circuits, the obligatory passage points, the exogenous factors – can leave the uninitiated a little bemused at times ... the framework is not exactly intuitive”.

The fourth paper is written by Silva and Fulk (2012) who conducted a longitudinal case study of power relations during an ERP implementation in a university. This study presents how the power struggles and disturbances to the circuits of power arise and intensify during the implementation of the project. The authors identify two tactics related to the episodic circuit – bypassing and workarounds, the first being classified as overt resistance for achieving social integration, while the second is conceptualised as a response to disturbances in the circuit of systemic integration. In the case study, the users’ overt resistance was strong enough so that the users, as the weak group, communicated with and convinced their campus top management (i.e. president), bypassing the authority of the project management group, forcing project management group to negotiate seriously which then led to some compromise agreement. Therefore, bypassing classified as overt resistance is done with the purpose of undermining the standing conditions of the powerful group while enhancing their own so as relating to social integration. However, there is some confusion as to how the bypassing tactic relates to group power since the campus top management who provided senior support to the users was also a powerful group – actually legitimately more powerful than the project management group. Further, although the circuits’ conceptual richness helped the authors in structuring and

conceptualising the case, it is difficult for readers to thoroughly understand how social integration can be achieved because the system being studied in the case did not complete integration whereas the Circuits of Power model focuses on integration as a result of power.

Another theorist, Bruno Latour (2005, 1986) who expands Foucault's (1977) notion of power and discipline, also offers contextual knowledge regarding the processes/structures of power. Before turning to the application of Latour's work in IS research, a brief representation of the power-related concepts in Latour's Actor-Network Theory will be given. Latour's theory perceives our contemporary society and organisations as constituted by heterogeneous elements of human actors and non-human actors (i.e. technology, machines and objects) and the fundamental aspect is the relationality of these actors, each of which is interactively constituted in relationship with other actors in the actor-network (Doolin and Lowe, 2002). A typical actor-network in the context of IS implementation projects can be a heterogeneous set of alliances between people and machine (see the left part in Figure 2.6) and the project team seeks to enrol other actors (human and non-human) into the network (see the right part in Figure 2.6) by persuading them that they share a common interest or problem (Latour, 1987). This process of negotiation involves power relations (Callon and Latour, 1981). Thus Latour (1986) argues that power should be treated as an effect of collective action rather than a cause: the spread of the initial force (i.e. the order made by a powerful party) needs new sources of energy all the time and these sources of energy are in the hands of people who may act in many different ways thus the force (i.e. the order made by a powerful party) is slowly modified and translated by many different people as they sought to achieve their own goals. Thus power is not something one can store and possess, but something that has to be obtained from 'others' – these 'others' refer to the ones who are really powerful and doing the action and they attribute their action to one amongst them who becomes powerful (potentially).

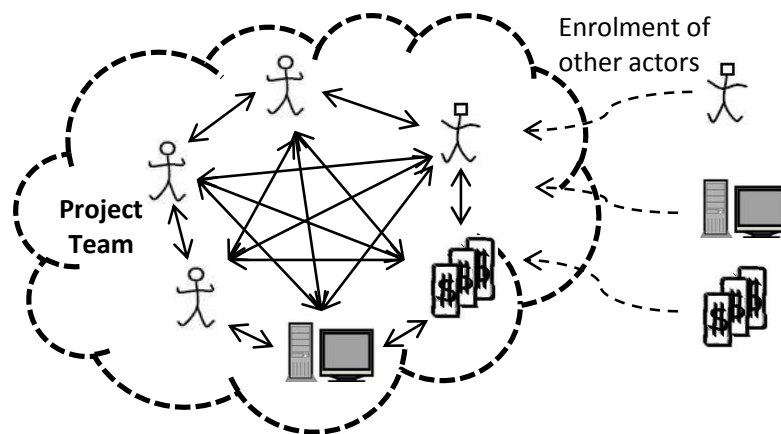


Figure 2.6 An example of Latour's actor-network and enrolment of allies

Latour's Actor-Network Theory with its central concern being understanding the role of technology within society has been used in IS research to investigate the relations between technology and organisation. Bloomfield and colleagues (1991, 1995, 1997) have used Latour's perspectives to investigate power, technology, and social relations in a computerised IS based organisational change in health services, specifically Bloomfield used Latour's notions of inscription devices in Bloomfield (1991) and Latour's notions of durability and delegation in Bloomfield (1995). Bloomfield et al. (1997) analysed a series of events by using Latour's Actor-Network Theory in the IS development in the health services. They argue that organisational IT systems are actor-networks as combinations of heterogeneous actors (i.e. hardware, software, representations of organisational phenomena, and expectations about groups of users) and the development and implementation of an IT system mediates and is mediated by the exercises of power within organisations. Bloomfield (1995) argues that the regularity and self-discipline of the staff is mediated and reinforced through the actions delegated to the systems. The delegation to the systems then becomes political because the staff's accepted ideas, ways of thinking or their approaches to problems tend to be dominated by the technologies of information and its representation. Moreover, the IT involved in the organisational change makes the goal of competition and social relations more durable and more stable and Bloomfield argues that this durability is not because some management authorities are in a

position of domination or have used technology to reinforce their position, but because of a wider, more complex network of social relations that has begun to emerge. Bloomfield et al.'s works have empirically represented the social relations and political games in the development and implementation of IS by adopting Latour's ideas. However, they do not provide a practical guidance in tactical management of power that is of relevance and interest to IT project leaders; for example, they do not make it clear in such complex actor-networks of how a change agent may succeed in persuading change recipients in an IS-based organisational change.

Thus Latour has offered sensitive notions of power and has contributed to the IS field by discussions in the Actor-Network Theory about the relationship between technology and society. Although Latour makes it clear that power relations are involved in complex actor-networks and resistance may happen in the process of building a network, the notions of power in Latour's theory do not provide IS practitioners with tangible themes that can be utilised in tactical exercises of power and management of resistance behaviours. It may be well used to discover the social relations and changes in organisations but somewhat omit the detailed aspects of ways/processes of dealing with resistance and effective use of power.

The theories of Giddens, Clegg and Latour have provided insightful theoretical frameworks regarding the processes and structures of power and are more tangible for IS theoreticians and practitioners to use as theoretical lenses in the study of specific organisational events (e.g. IS implementations) than the theories which only concern the nature of power. However, these theories are somewhat lacking in intuitive clarity for researchers to possess immediate apprehension regarding the operation of power. When using the themes and concepts from these frameworks, one may have difficulties in evaluating, determining and explaining overt political conflicts and explicit resistance behaviours.

2.4.3. Personal Characteristics and Skills/Tactics in the Application of Power

Aside from the structural determinants of power mentioned above, there are, in addition, various personal determinants of power including personal characteristics,

personality traits, social skills and tactical influence behaviours (Yukl and Tracey, 1992, Yukl et al., 1993, Kipnis and Schmidt, 1980, Anderson and Spataro, 2008, Keltner et al., 2003, Yukl and Falbe, 1990, Kelman, 1958, Enns et al., 2001). Certain personal characteristics, which have been found to include physical attractiveness, height and muscle mass for men, certain facial characteristics and the like, are associated with elevated levels of power in individual cases (Anderson and Spataro, 2008, Keltner et al., 2003, Savin-Williams, 1977). Some personality traits, for example extroversion and increased social skills are similarly associated with increased individual levels of power and influence (Anderson and Spataro, 2008, Keltner et al., 2003, Coats and Feldman, 1996).

Various patterns of influence behaviours are also known to be used by individuals in order to direct and change the behaviour of others, and thus, by definition, are an aspect of the application of power (Yukl and Tracey, 1992, Yukl et al., 1993, Kipnis and Schmidt, 1980, Yukl and Falbe, 1990, Kelman, 1958, Enns et al., 2003). Such patterns of behaviour are often referred to in the social psychological and organisational literature as influence tactics (Yukl and Tracey, 1992, Yukl et al., 1993, Yukl and Falbe, 1990). The studies investigating such behaviours are extensive and can be traced back to the 1950s (Faeth, 2004). Notable in this research is the set of social psychological studies carried out by Yukl and his colleagues, leading to, among other things, a classification of ten proactive influence tactics including rational behaviour, coalition building, consultation, establishing the legitimacy of requests, personal and inspirational appeals and so on (Faeth, 2004). Further, some of these power and influence behaviours have been found to be, generally speaking, more effective than others (Yukl and Tracey, 1992, Mowday, 1978). Outside the work of Yukl, there is literature indicating that participative approaches and approaches that have significant levels of organisational and procedural justice may impact the way power relations play out (Heller, 2003, Eberlin and Tatum, 2008, van Dijke et al., 2010).

The overall implication of the above is that the socially skilled, who can deploy such tactics with finesse and skill, will be more effective in using influence and power to successfully direct and manage change. Effective use of such power and influence

behaviours would thus, arguably at least, be critically important in IS implementation projects. However, surprisingly, IS research on power relations in IT projects on this aspect of the application of power has been especially sparse and only a few studies have examined personal influence behaviours and tactics in setting up and implementing IT projects (Enns et al., 2003, Enns et al., 2001). Thus there are significant aspects of power relations that lack an adequate focus or even absent from the analyses of power in the IS literature.

2.5. A NEW RESEARCH DIRECTION – TURNER’S THREE-PROCESS THEORY

The IS research reviewed above has used the theories of philosophers and sociologists to analyse the IS studies concerned and to understand the phenomenon of power relations in IS implementation projects. Possibly, in part at least, because of the nature of the disciplines of the theorists concerned, the theories used are highly general, abstract, and at times, somewhat opaque and lacking in intuitive clarity, especially when applied to particular organisational events at the level of detail appropriate to IS implementations. The inferred notion in the classic theories of social influence (French and Raven, 1959) that power flows from resources does not provide a useful guidance to see how social changes work, especially resistance behaviours in IS implemented organisational change. Furthermore, the theories reviewed above omit the aspect of personal skills and tactics in the application of power which can act as an important aspect in negotiating with stakeholders in IT projects.

An arguably more tangible and potentially useful theory concerning the nature and operation of power has emerged in social psychology and is based on the work of Turner and other social identity theorists in that discipline (Turner, 2005, Simon and Oakes, 2006). Turner’s (2005) Three-Process Theory of Power emerged in the mid-2000s and, despite its potential to shedding new light on the exercise of social influence and power, has not been used as a theoretical lens in any studies of power relations in IT projects to date. This constitutes a real opportunity to researchers in IS and other social science disciplines to increase and deepen the understanding of power relations in organisations. This section will first introduce the social identity theories on which

Turner's theory of power is built and give a detailed explanation of the main principles of Turner's theory. It will then give a comparison of Turner's theory of power with traditional theories of power in the IS domain and a consideration of the weaknesses and challenges of using Turner's theory and its associated underpinning theories.

2.5.1. Social Identity Theory and Self-Categorisation Theory

Turner's (2005) Three-Process Theory of Power is based on his work with Tajfel, Oakes, Hogg and others in Social Identity Theory (SIT) and Self-Categorisation Theory (SCT) (Tajfel and Turner, 1979, Hogg and Turner, 1985, Hornsey, 2008, Drzensky and Van Dick, 2013, Turner and Reynolds, 2010, Oakes et al., 1991, Oakes et al., 1994a, Tajfel et al., 1971, Turner, 1978a, Turner, 1978b). SIT was developed to explain the psychological basis of intergroup behaviour, particularly the discrimination of in-group members against out-group members, that is of 'us' against 'them' (Hogg and Turner, 1985, Tajfel and Turner, 1979, Hornsey, 2008). Different groups are characterised by differences in power, status and prestige. Belonging to a group confers a certain identity which leads to certain behaviours which includes supporting one's own group, the in-group, and being more open to persuasion by members of this group, while simultaneously discriminating against and being somewhat impervious to influence from the relevant 'others' in any social situation, that is, the out-group (Ashforth and Mael, 1998, Hogg and Terry, 2000, Hogg, 2001a, Hogg, 2001b, Schwarz and Watson, 2005, Reicher, 2004).

In the 1980s, Turner extended and deepened his ideas regarding SIT and psychological group formation with and through the development of SCT (Turner, 1984, Turner, 1985, Turner, 1987b, Turner et al., 1987). SCT argues that individuals have a rough hierarchy of categories (e.g. women, female nurses, mothers) that they refer to in order to give meaning and direction to their social life (Hogg and Turner, 1985, Turner, 1985, Turner, 1987b, Turner et al., 1987, Hornsey, 2008, Turner, 1991a). Belonging to a particular category is equivalent to belonging to a psychological group in which a series of values and interpretations are shared. An example of such categories may be those categories applying to two female academics, one an accounting academic and the other a management academic, both in University X. These two persons would likely

belong to such groups as University X, the Business School of University X, academics, and women; these groups being in a rough and perhaps overlapping hierarchy. In a faculty budget situation, these two women may be rivals and power players in the competition for resources, but in a different situation, may both support the University in building its reputation in competition with other universities. At an even more inclusive level, both academics may support women in general in equal pay and other social justice issues. Thus, different categories have salience in different situations.

A psychological group is defined by Turner (1984, p. 530) as “a collection of people that share the same social identification or define themselves in terms of the same social category membership”. As mentioned above, when an individual accepts and internalises (or is persuaded to accept) a category as applying to them, they act as a member of a psychological group. Such acceptance may occur over a long period of time, but can at times occur quickly in a particular situation (Turner, 1987b). This will lead to an individual accepting and behaving in accordance with certain values that are regarded as typical of the category or group. Based on a number of experimental studies (reported in Turner, 1978a), Turner (1987b) concluded that if individuals accepted such self-categorisation then psychological group membership was in play even in cases where members did not have personal proximity and interaction, were not directly interdependent and lacked the cohesion of some social groups. For example, membership of the nation state or a global organisation could constitute such categories (e.g. Australians belong to the nationality without necessarily interacting with all other Australians).

Turner (1984) emphasises that the mutual need satisfaction or interpersonal interaction and attraction may exist in social groups but there does not need to be these factors to form a psychological group and the only basis for a psychological group is self-categorisation (shared identity). Psychological group membership offers members the potential positive effects of making sense of the world and hence reducing uncertainty, as well as support for one’s self interest, and potentially (for high status groups at least) self enhancement. In terms of social influence and power, psychological group members are open to persuasion and influence from other

members, particularly highly prototypical members, as they wish to retain their psychological group membership, hence the link to power (Turner, 2005).

2.5.2. Key Principles of Turner's Three-Process Theory of Power

In formulating the Three-Process Theory, Turner rejected the notion common in other social psychological and sociological theories of power that power springs from the control of resources that are valued, desired and needed by others (Deutsch and Gerard, 1955, Festinger, 1950, French and Raven, 1959, Kelman, 1958). For Turner, power springs from psychological group membership as indicated in SIT and SCT. Thus, Turner asserts that he is formulating a way to study “how power emerges from and functions within social relationships with a definite social, ideological and historical content, rather than redefining it as an abstract external force producing generic psychological effects” (Turner, 2005, p. 1) and, further notes that his theory emphasises “group identity, social organisation and ideology” (Turner, 2005, p. 1), rather than dependence on resources as the basis of power. Power in the Three-Process Theory operates through either persuasion or control, where control, in turn, operates through the processes of authority or coercion (see Figure 2.7). In this way, Turner explains the nature of power through people.

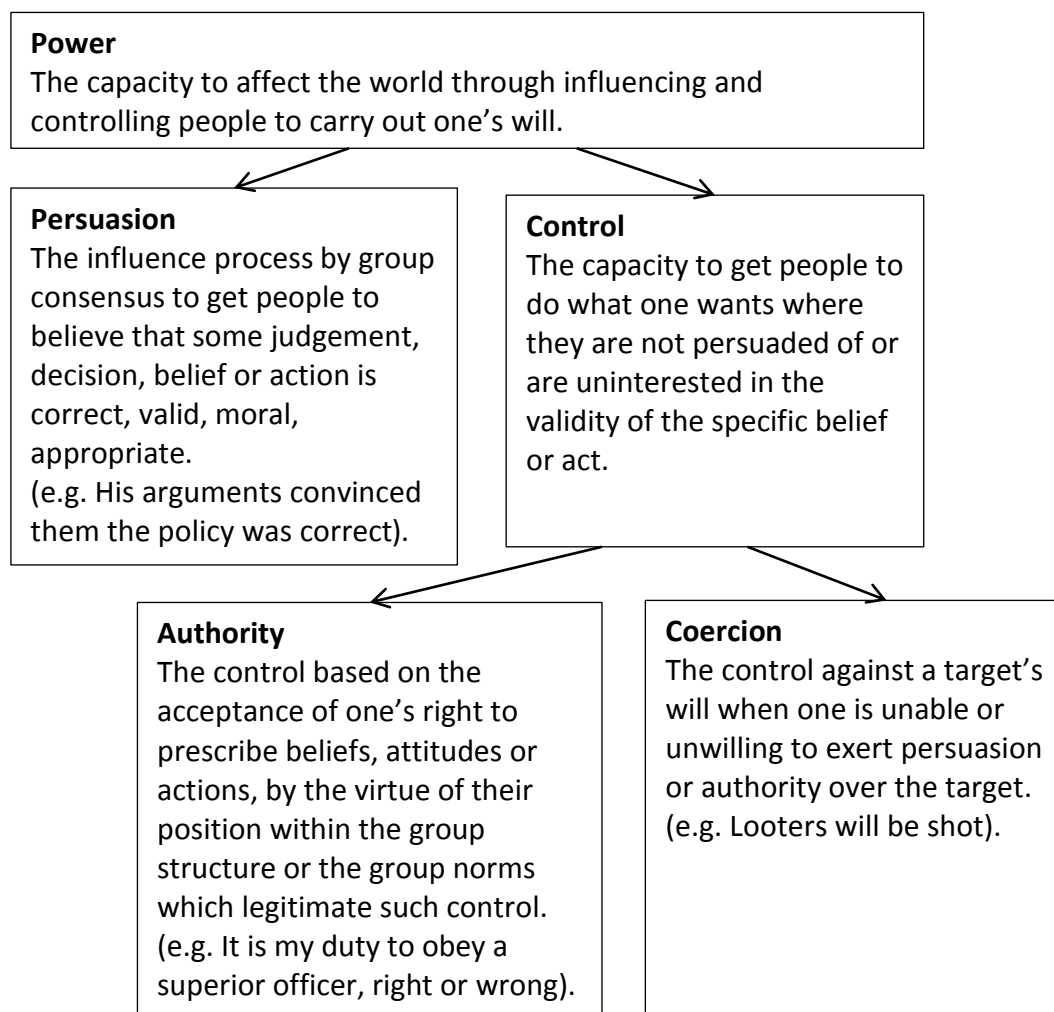


Figure 2.7 The nature of power (adapted from Turner, 2005)

Thus in his causal scheme, psychological group formation processes produce influence which gives people power through the three processes of persuasion, authority and coercion, and the power in turn leads to creation and control of resources (see Figure 2.8). In general, Turner (2005) argues that people are more likely to be persuaded by intragroup members as they have shared experiences, attitudes and beliefs and such intragroup *persuasion* is influence itself. The most prototypical member within a psychological group tends to be viewed by other intragroup members as the leader, and thus *authority* power is legitimated by group norms, values and structure. When the psychological reality based on self-categorisation and social identity processes changes, the dynamic transformation from intragroup influence to intergroup *coercion*

can happen (Turner, 1991b). Coercion, then, is what people resort to when they are not willing to or cannot persuade, and are not believed to have authority.

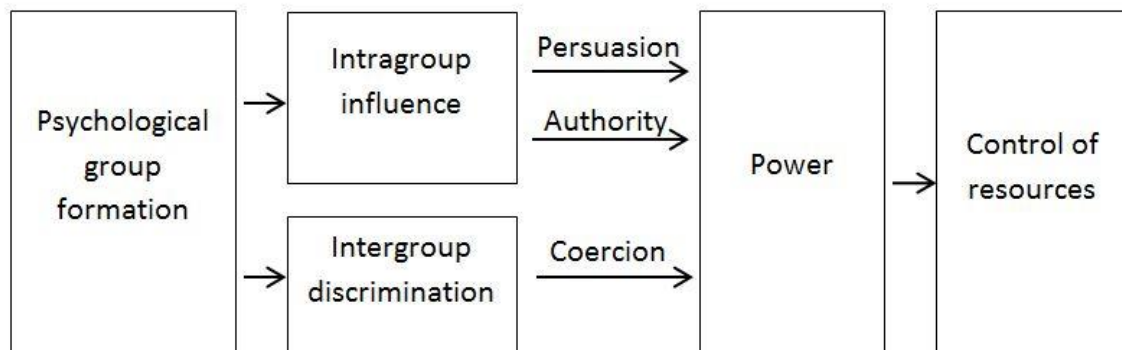


Figure 2.8 The Three-Process Theory of Power (adapted from Turner, 2005)

Turner does not give a set of stages or steps by which these three processes operate, but does discuss the principles of their operation and the advantages and disadvantages of each of these modes of power. In describing Turner's causal scheme of from group to influence to power to resource control, particularly the operation of the three processes, the key principles of Turner's theory are summarised below.

Principle 1 – People tend to self-categorise into psychological group(s) and these self-categorisations become relevant in determining behaviours in particular contexts or situations.

As Turner's Three-Process Theory of Power is grounded in the social identity theories, the first principle is based on the ideas of SIT and SCT as discussed in the previous section. Here a more detailed explanation will be given by using an example to show how social identities may affect persuasion. As mentioned, social identity is seen as part of the self-concept that is derived from perceived membership in a relevant social group (Turner and Oakes, 1986). Here, two questions may arise:

- How does a self-perceptual identity influence the formation of a psychological group?
- How is a collection of individuals likely to categorise themselves as a group?

In order to answer the questions, Turner (1987b) argues that there are three levels of abstraction relating to self-categorisation: the super-ordinate level ('inter-species' or 'human'), the intermediate level of intergroup ('intra-species' or 'social') and the subordinate level ('intragroup' or 'personal'). People all have multiple self-categories at each level of abstraction (also known as self-concepts or self-identities, defined in both Turner (1987b) and Turner and Reynolds (2010)). Some of these categories, as mentioned earlier, are arranged hierarchically (e.g. 'senior woman academic' is a sub-category of 'senior academic'). The relevance of these self-categories depends on the context or issue that is currently being deliberated upon. Thus the self-categorisations at different levels of contexts become salient in specific situations producing specific self-images (Turner, 1987b). The produced self-images then help individuals determine the relative similarities/differences between the self and others. Any collection of individuals in a given setting is more likely to categorise themselves as a psychological group depending on the degree that the subjectively perceived differences between them are less than the differences between them and other people; that is, intragroup differences are perceived to be less than intergroup differences. Thus, a psychological group is formed as 'the ratio of intergroup to intragroup differences' (termed as 'meta-contrast' by Turner, see Turner (1985), Turner and Oakes (1986) and Turner and Reynolds (2010)) increases through the self-grouping process in which the salience of self-categories can be 'on and off' between different levels of contexts (Turner and Reynolds, 2010, Oakes et al., 1994b, Turner, 1987b). This is the way Turner and his colleagues explain how a collection of individuals is likely to categorise themselves as a group based on their self-perceptual identity.

Take Julius, the Head of Physics Department in University X (see Figure 2.9) for example. The following discussion will explain how Julius' self-categorisation is likely to change at different levels of contexts.

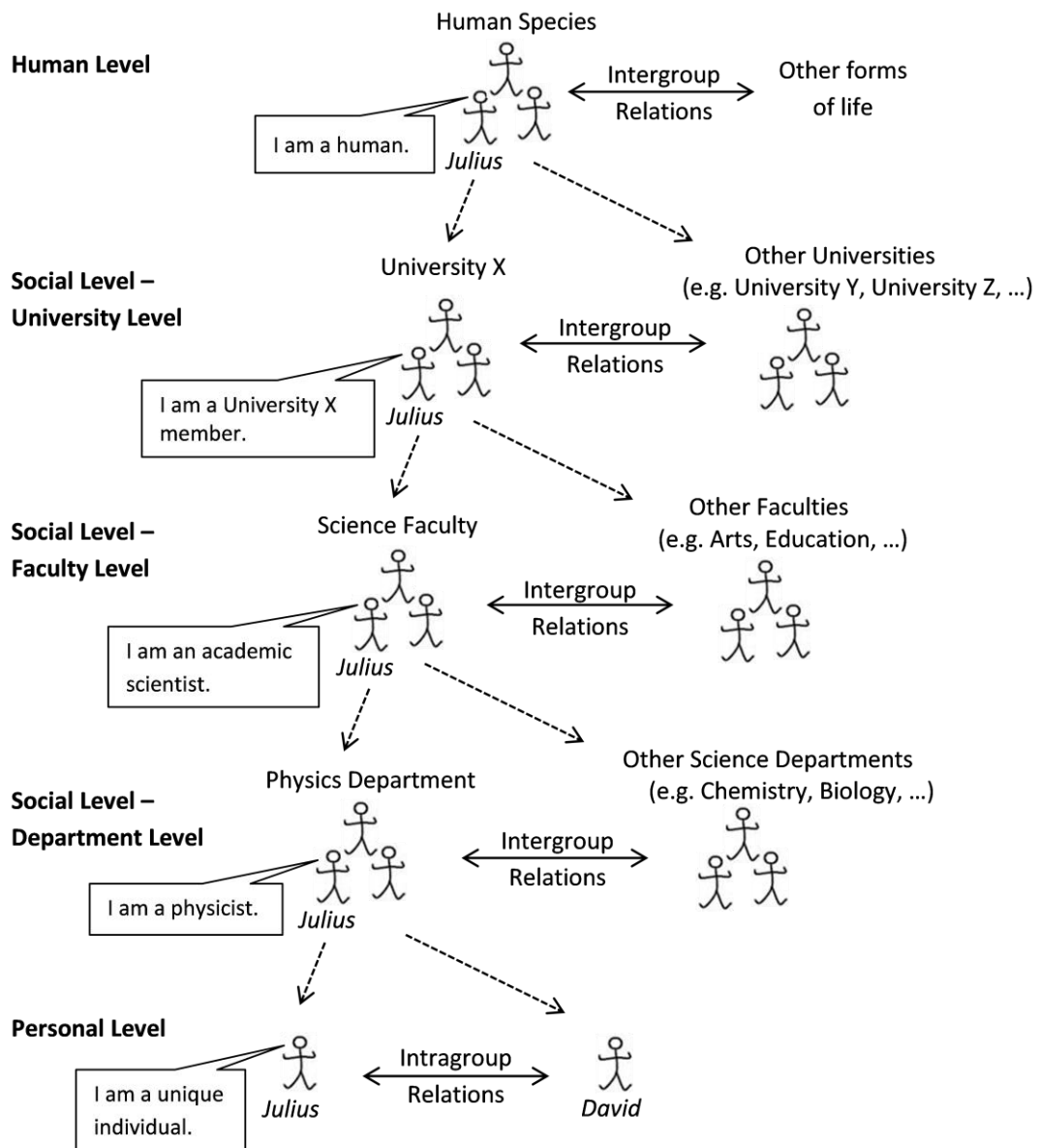


Figure 2.9 An example of self-categorisations at different levels of social contexts

As the human level is too abstract in defining the self (i.e. Julius shares the identity as a human being with other members of the human species in contrast to other forms of life), it is not included in the discussion. The intermediate (social) level is more important and relevant in understanding the self-categorisation processes.

At the social level, there are finer gradations of self-categorisation ((Turner, 1987b) allows the finer gradations within the broad level of inclusiveness) – university level, faculty level and department level as shown in Figure 2.9. At the *university* level, when competing over government funding for universities, Julius’ self-identity as a University X member may become salient. When involved in discussions surrounding the university budget at the *faculty* level, the Head of Physics is likely to side with other Heads in the Science Faculty, to argue the case for more funding for the Science Faculty. In this context, Julius is more likely to perceive relatively less difference between him and other academic scientists than differences between the group of academic scientists and other academics. His self-category as an academic scientist in the Science Faculty thus becomes salient so that he would identify with other Heads in the Science Faculty against the (relevant) out-group consisting of the other Faculties such as Arts, Education and so on. However, during discussions within the Science Faculty regarding how their allocated budget will be distributed amongst schools, Julius as the Head of Physics may now well find himself in conflict with the Heads of other Science departments such as Chemistry and Biology. Julius’s subjectively perceived differences between him and other physicists are now less than the perceived differences between the group of physicists and the group of chemists, for example, and thus his identity of being a physicist becomes salient at the *department* level. Thus the same person categorises himself differently in different situations, and interpersonal interactions and behaviours may change accordingly.

The personal or subordinate level is based on the comparisons between self and in-group members as unique individuals, for example, in term of personalities. At the *personal* level shown in Figure 2.9, Julius and David may define themselves different from each other as unique individuals but what matters is in some contexts Julius and David may perceive themselves (both physicists) more different from out-group members (e.g. chemists and biologists). A single level of personal self-categorisation is identified by Turner (1987b, p. 46) as less important than the social level in defining the self. As Turner notes, “the personal self reflects only one level of abstraction of self-categorisation, of which more inclusive levels are just as valid and in some

conditions more important”. The personal self becomes salient only when comparisons are restricted to intragroup members.

Hence, the scientist category becomes salient in the broad university context – the physicist category becomes salient within the faculty context. Different self-categorisations have salience in different situations, and impact on behaviours accordingly. People tend to self-categorise themselves into particular psychological group(s) in specific situation(s), and tend to be open to persuasion and influence from other similar group members within a shared group context.

Principle 2 – Psychological group formation produces a situation of mutual influence through a shared identity, which forms the basis of power through persuasion.

Based on the ideas of SIT and SCT discussed above, Turner (2005) argues that power exercised through a psychological group is a function of the group identity and consensus. People in a psychological group see themselves as more similar to each other than they are with people in a different group and hence expect to have similar views within their psychological group. This forms a basis for intragroup influence and promotes the exercise of power through persuasion. People are more likely to be persuaded by intragroup members as they usually have shared attitudes, beliefs and experiences.

As shown in Figure 2.10 for example, Andrew and Michael are two members of Y Team in the X Project Team, where Andrew is the Y Team Leader and Michael is a Y Team worker. When Michael’s identity as a member of Y Team becomes salient and the matter of discussion is about the improvement of their team performance, Andrew is perceived by Michael as an in-group member based on the shared identity, and thus they tend to engage in mutual persuasion to reach agreement. The shared group identity unifies and empowers Andrew and Michael by encouraging in-group consensual support. Intragroup similarities between Andrew and Michael are apparent in this context because they are categorically interchangeable as members of Y Team (Oakes et al., 1994c, Turner, 1984).

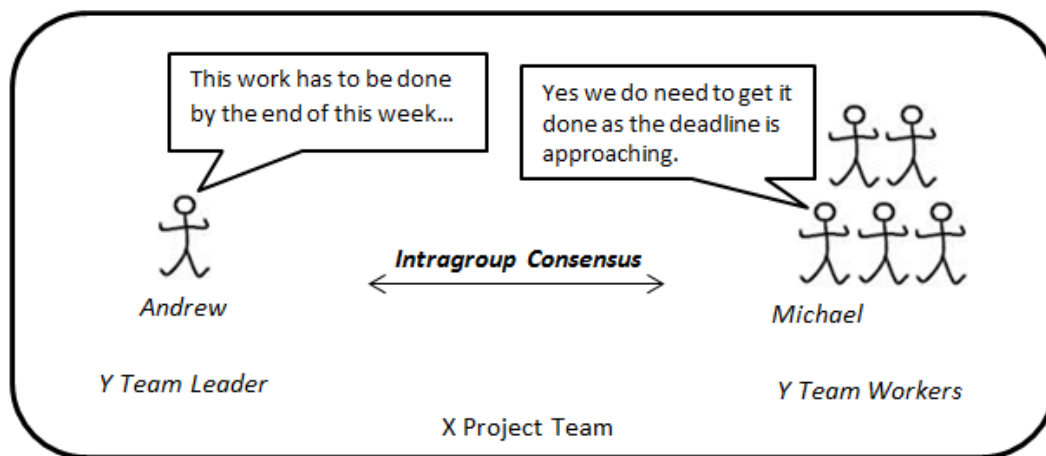


Figure 2.10 An example of persuasion-based power

Mutual influence is possible between in-group members, and Turner argues that this is the basis of power through persuasion. Turner (1984, 2005) also emphasises that the basis of power is psychological group formation which depends on a process of identification. Thus Turner distinguishes his theory from the classic theories of social influence (French and Raven, 1959, Kelman, 1958) since unlike these authors, power and influence do not depend on the possession of necessary or desirable resources. Organisational actors are not submitting to others because they need access to necessary resources but because they are persuaded through negotiation and collective validation of the reality within their reference group.

Principle 3 – Authority is the power based on in-group norms that group members ought to follow a specific person or position (leader) that has the right to control them in certain matters.

Authority is power that is legitimated by in-group norms that have a shared social identity as their basis. It is conferred by “formal agreement, custom or the norms inherent in group activity” (Turner, 2005, p. 11). Thus, facilitating collective action to achieve common goals and quick and decisive action at times and in situations where it is necessary. Thus the tacit or formal agreement involved in authority permits a designated group member to control others in the in-group. Authority, then, short-

circuits the debates, deliberations, and arguments that may take place without such a working agreement in place.

A typical in-group in which authority commonly operates is the psychological category or group of committed members of a business or government organisation. In order to retain the group membership and the benefits that flow from being an employee, members of business and government organisations submit voluntarily to the authority hierarchy of the organisation. To take this example further, consider the two members Andrew and Michael of Y Team in the X Project Team (see Figure 2.11), where Andrew is the Y Team Leader. The diagram shows the use of authority as a form of power. At the personal level Michael and Andrew disagree, however if the disagreement is about X Project matters then the authority hierarchy of the organisation becomes salient and Michael is likely to go along with Andrew because Andrew has the authority of a Team Leader. Michael then agrees, not necessarily because he is persuaded, but because he is submitting to the legitimate authority. That is, Michael agrees that Andrew has the authority right conferred by the group norms (team hierarchy) to mandate that to him.

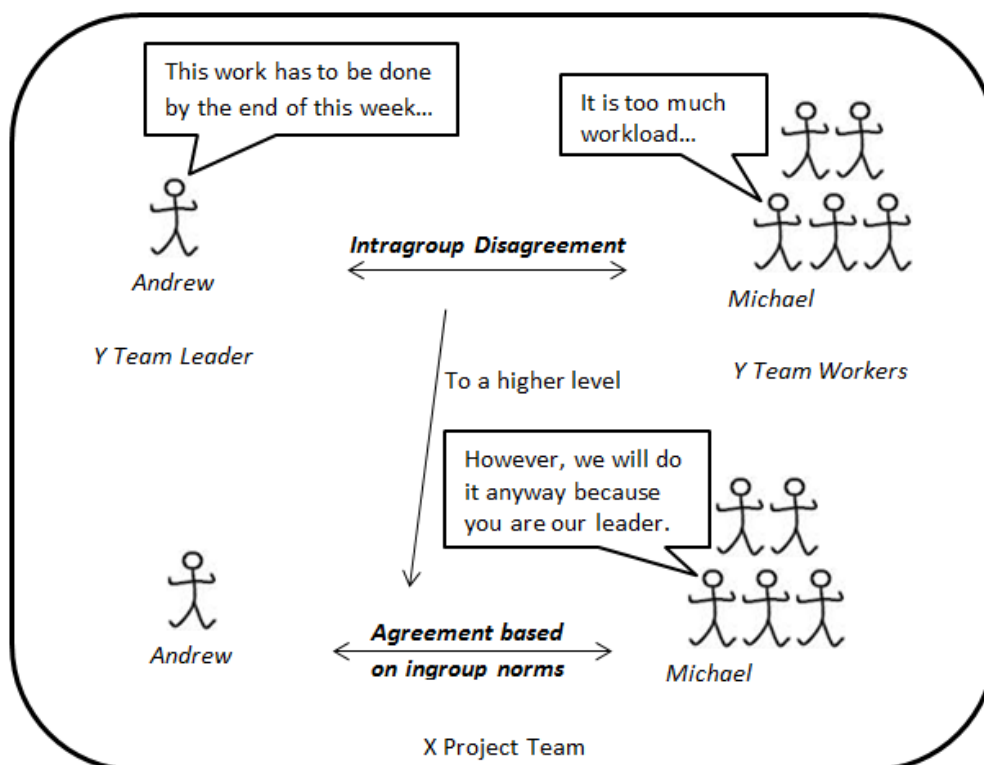


Figure 2.11 An example of authority-based power

Principle 4 – Coercion is the power to control a target against their will through the deployment of resources to constrain and manipulate their behaviour.

Turner refers to coercion as “authority in a dark mirror” (Turner, 2005, p. 12). It is the form of power employed when one cannot or is not willing to persuade, and further, one does not possess legitimate authority. Given this, it is likely that persons resorting to coercion in a given situation lack a shared identity with the target(s) of the coercion and thus have little basis for persuasion and are unlikely to possess any legitimate authority in the view of the target(s).

The role of human, financial, material and other kinds of resources in coercion requires careful consideration. While coercion may require access to resources of various kinds to carry it through, the fundamental nature of coercion is that it is a conflictual attempt to control in the absence of legitimate authority or the ability to persuade the target(s). However, in a sense, coercion does indeed depend on influence. Successful coercion requires persuasion and authority over its coercive agents, in Turner’s (2005, p. 12) words, as a “willing executioner”. For example, a religious leader who drives his/her followers to carry out attacks against others must have influence and authority to induce the followers to conduct such acts.

As an example of coercion, consider Figure 2.12. Y Team Worker, Michael, is told by his Team Leader to work through meal breaks until midnight in order to finish work on a number of important deliverables but Michael believes Andrew’s command to be outside of Andrew’s authority. In this context, Andrew may have become a coercive agent of his superior in the X Project Team, at least perceived by Michael. Although considered overt resistance, but in the face of threats to fire him, Michael eventually complies. However, at the same time Michael may take action to quietly resist Andrew’s command such as secretly taking meal breaks, and further, now mistrusting Andrew, decides to look for ways to resist future coercion attempts.

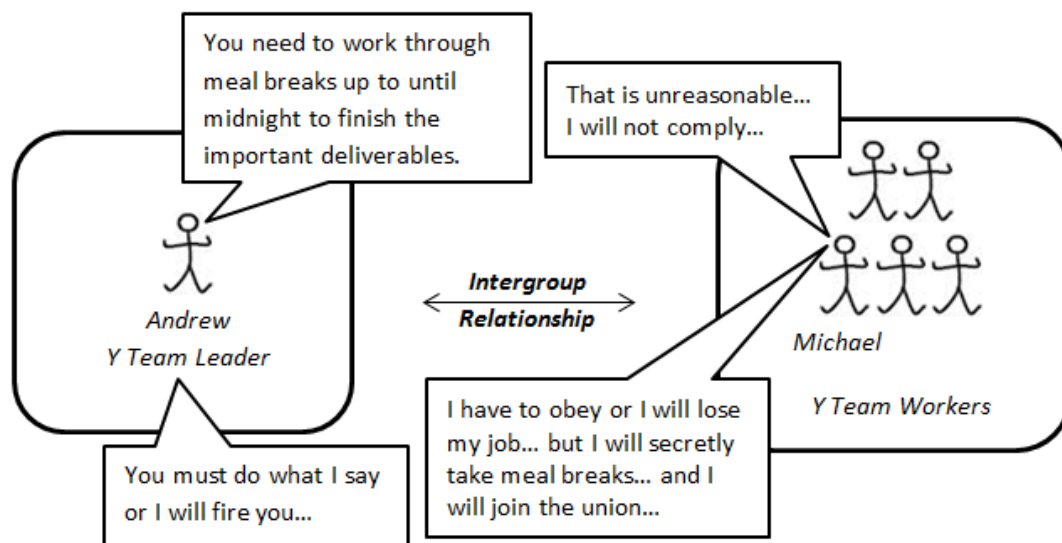


Figure 2.12 An example of coercion-based power

Principle 5 – Resistance can be understood as a response to perceived coercion to an extent or a perceived threat to the psychological group identity that people wish to retain.

As presented in the previous example (see Figure 2.12), the use of coercive power is not without its problems. Coercion tends to generate mistrust in the targets, and weakens the possibilities of the future use of persuasion and authority (Kramer, 1999, Turner, 2005). Thus it undermines the possibilities for legitimate influence. Further, coercion provokes and encourages resistance and leads to the need for surveillance in order to enforce its conditions. Thus, a risk of coercion is that it tends to weaken the power of those applying as it may bring into being an adversary opposed to the source of the coercion (Turner, 2005). Thus, a risk of coercion is that it tends to weaken the power of those applying it as it may bring into being an adversary opposed to the source of the coercion (Turner, 2005). Turner's theory thus includes an explanation of phenomena as resistance (van Dijk and van Dick, 2009) and persistence with failing projects (Haslam et al., 2006).

Turner (2005) emphasises that the basis of power is shared identity, not resources. Shared identity leads to the formation of psychological groups, which, through persuasion and authority, are capable of coordinated collective action to achieve

shared objectives. Such action can lead to the accumulation of assets and resources. Therefore, shared identity leads to the control of resources and not vice versa.

Note further, that many of the important resources are people anyway, and such resources depend, to an extent, on the influence that flows from shared identity. However, although Turner (2005) does not emphasise the point, it is also the case that control over resources helps in the exercise of power, and indeed can entrench power to a degree. However, if identities, and hence allegiances, change through persuasion then group memberships can change and with them the control of resources. Indeed, if the control of resources was the primary element in power relations, it would be difficult, once one group establish control over important resources, to see how social change would ever be possible.

The five principles articulated above form the basis of Turner's (2005) social identity based theory of power. Turner provides an insightful framework for understanding and interpreting different group members' experiences and perceptions of persuasion, authority and/or even coercion in project events surrounding the issues and problems inhibiting the project's progress. It enables researchers to draw on particular power-related events in project groups, which are usually constituted by different professional groups/stakeholders, different gender groups, or different hierarchical levels. It may not be easy to draw lines and define persuasion, authority or coercion for each particular behaviour as sometimes one believes authority is exercised while the target perceives coercion. As Turner's social identity approach focuses on one's perception of the world and the self, the understanding and interpretation of behaviours always depends on the story teller's expression based on their experience of persuasion, authority or coercion. This constitutes the basis for understanding how power relations operate in a project context.

2.5.3. Comparison of Turner's Theory and Other Theories of Power

Turner's (2005) Three-Process Theory of Power is highly consistent with the social theories on power that have been already familiar to IS audiences (see Table 2.1). Turner's (2005) conception of persuasive power through identity is highly consistent

with French and Raven's (1959) 'reference power' as the ability to influence. It also shares similarities with the 'structure of signification' that consists of shared knowledge and cognitive rules for communicating in Structuration Theory (Giddens, 1984), the 'facilitative power' that involves the bending of wills so as to achieve collective goals in Circuits of Power model (Clegg, 1989c), and the 'ideological power' concerning shaping people's perceptions and preferences in a way that they accept their role in the existing order of things in Three Dimensions of Power model (Lukes, 1974, Lukes, 2005). Moreover, Latour (1986) also argues that power should be treated as an effect of collective action rather than a cause. To Latour, power is not something one can store and possess, but something that has to be obtained from the ones who are doing the action and attribute their action to one amongst them who potentially becomes powerful.

Theory/framework	Concepts of power in the theory		
French and Raven's (1959) bases of power	Reference power	Legitimate power	Coercive power
Giddens' (1984) Structuration Theory	Structure of signification	Structure of legitimation	Structure of domination
Clegg's (1989a) Circuits of Power	Facilitative power	Dispositional power	Causal power
Lukes' (1974, 2005) Three Dimensions of Power	Ideological power	Non-decisional power	Decisional power
Foucault's (1979, 1980, 1988) theories of discipline and power		Disciplinary power	
Turner's (2005) Three-Process Theory of Power	Persuasion	Authority	Coercion

Table 2.1 Comparison of Turner's theory and theories of power in IS

The perspective of authority in Turner's theory also shares similarities with the theoretical views of power, legitimation and authority that have been already familiar to IS audiences such as the 'legitimate power' in French and Raven (1959) and the 'structure of legitimation' in Structuration Theory (Giddens, 1984, Orlikowski, 1992, Jones and Karsten, 2008). Dispositional power in Clegg's (1989c, 2006) circuit of social integration, to some extent, is also similar to Turner's (2005) account of authority as it is concerned with the structures, rules and policies that create meaning in organisations and give membership to groups (Smith et al., 2010, Backhouse et al., 2006). The difference is that dispositional power includes access to resources (Silva and Backhouse, 2003, Clegg, 1989c) while in Turner's (2005) theory authority does not need to rely on resource. Another similar understanding of power and authority is influenced by Foucault's work which explains the role of information systems in facilitating a calculative form of control over organisational members as activities are scrutinised, measured and evaluated by supervisory authorities so that constitutes a new internalised discipline of norms and behaviour (Doolin, 2004).

Further, Turner's coercion concurs with the traditional notions of power in the IS field whereby power is a resource possessed by someone which enables them to direct, command or coerce others such as 'coercive power' in French and Raven (1959), 'structure of domination' in Giddens (1984), and 'causal power' in Clegg (1989a). The overall implication of the above is that Turner's contribution to the IS field is strengthened by associating these theories together and introducing the social identity approach concerning the nature of power (i.e. psychological group formation). The social identity approach has potential to contribute to the understanding of power and effective IT project management (Whitley et al., 2014, Ye et al., 2012, Ye et al., 2014). For example, a person in a project team with very high IT skills may be able to, in some contexts, exert more authority than his/her position in the organisational hierarchy would predict. With the priority of an IT project, the IT professional, together with their IT group may be able to progress the project by getting a higher-level manager's support in engaging the group of users.

As argued earlier, Turner (2005) also contributes to the concept of power by rejecting the classic theories of social influence which rely on the notion that power springs from the control of resources that are valued, desired and needed by others (Deutsch and Gerard, 1955, Festinger, 1950, French and Raven, 1959, Kelman, 1958). Instead, Turner views power as the result of psychological group formation and argues that neither group formation nor influence is based upon resource dependence but the power and influence driven from group formation can lead to the control of resources. This constitutes several advantages in using Turner's theory and the associated underpinning theories of SIT and SCT to explain power relations and the associated phenomena. The traditional theories that rely on the notion that power springs from the control of resources seem to lead to problems in that different types of resources, such as physical and financial resources, informational resources, or expertise and so on, seem to lead to different power sources (French and Raven, 1959). Thus one can find resource dependency theories of power with one (Festinger, 1950), two (Deutsch and Gerard, 1955), three (Kelman, 1958) or five, six or more sources (French and Raven, 1959, Raven, 2001) whereas Turner's theory provides a parsimonious and coherent explanation of the source of power based simply on psychological group formation (Turner, 2005). The control of resources is believed by Turner to be only used when one cannot persuade or does not have authority power; that is, when one has to exert coercive power by controlling and using resources. The nature of power, Turner argues, springs from group identity and consensus and that the control of resources is the result of one gaining the power. Since resource control is the result rather than the source of power, one does not have to determine the types of resources to be able to study the nature and the operation of power by using Turner's theory. Thus Turner provides a strong point with his recognition of other sources of power (i.e. group consensus) and the incorporation of instances where control of resources is resorted to within his theory.

Theories that rely on resource dependency for an explanation of power also have problems explaining social and organisational change and related phenomena. This leads to difficulties in explaining how social and organisational change movements sometimes succeed when the parties concerned have few resources, whereas Turner's

theory has no such difficulties (Turner, 2005). In particular, whereas resource dependency theories of power have difficulties in explaining how groups that are low in the organisational hierarchy succeed in resisting IS innovations mandated by powerful organisational actors, social identity based arguments furnish a ready answer (Turner, 2005). In such a context, it can be argued that the resistant power from low-level groups who have few resources does not come from their control of resources but from the formation of their groups as the resistant force. Therefore, Turner's theory together with SIT and SCT, may also provide a more convincing explanation of such phenomena as resistance (van Dijk and van Dick, 2009) and persistence with failing projects (Haslam et al., 2006). Thus not only is it a new theory which provides additional insights, but also there are significant potential benefits for researchers in using Turner's Three-Process Theory in studying power phenomena in IS implementations. It motivates critical thinking of the relationship between power and control of resources. It also has the detailed focus in the specification of both the source of power and the processes of power to be applied to particular events in organisations. To understand and interpret people's experiences of persuasion, authority and/or coercion involved in the power relations among project groups, practitioners can be able to build a rich picture of the origin and nature of power and resistance based on different perspectives of groups in IS implementation projects.

2.5.4. Weaknesses of Turner's Theory and Challenges of the Current Research

There are some weaknesses with Turner's theory that need to be acknowledged. The first concern is the approaches used in the studies on which Turner's theory is built and developed. The findings in SIT and SCT on which Turner's theory is built are produced by social psychological experiments. In the two experiments reported fully in Turner (1978a), students were used in very artificial situations rather than real social contexts and the studies tend to provide ready-made and post hoc findings. Thus, a number of weaknesses might flow from this since there was no natural social structure and there were no real consequences that flow in real situations (e.g. people losing their jobs for poor decisions, or behaviours, or lack of good management). Indeed, research methods used in the study on which a theory is based can influence the

development of the theory. Thus there is a need to apply Turner's theory in real social contexts involved with complex relationships and consequences that flow in real situations (e.g. case studies) as potentially it can contribute to knowledge of power and social influence and the application of the theory.

Another weakness could be that Turner might overlook the organisational hierarchy or social structure in organisations, which could involve very considerable power differences in given contexts. That is, Turner omits the consideration of how an established social structure involved with the differences in status, resources, authority in the organisation or society affects power relations. This might be because that the theory is based on SIT and SCT, which were developed via social experiments and the experiments by their nature were conducted with experimental groups with no history or context and therefore no established social structure. Considerations of the effects of social structure are absent from SIT and SCT, and thus do not appear in Turner's Three-Process Theory. It is possible that Turner would have those using his theory to incorporate social structure into the set of psychological groups in given situations. Thus in an organisational setting, maybe the low level employees, their supervisors, middle management and senior management are all to be regarded as different psychological groups but how does one explain why, in this case, the low level employees often have less influence over company affairs than senior management? Indeed, sometimes a group of low-level employees can resist an initiative or a ruling by senior management but they risk sanctions or even dismissal. However, in most situations, the senior management has great power over the employees even when the employees are organised into unions as the senior management direct strategy, working conditions and policies – nearly everything to do with the lower employees' working lives. One incident where lower level employees succeed in resisting senior management does not mean that they have anything like the same power or influence. Therefore, the general view is that the hierarchy or social structure in a company could involve very considerable power differences and hence is important to consider.

In order to understand how effective Turner's Three-Process Theory of Power can be in a case study, it is important to know how SIT and SCT have been applied previously.

Two highly relevant empirical studies of using SIT and SCT to explore power and resistance behaviours in IT projects are Schwarz and Watson (2005) and van Dijk and van Dick (2009). Schwarz and Watson (2005) investigate how different group memberships reframe positions of authority or knowledge around technology change. Van Dijk and van Dick (2009) examine reasons for employees' identity-based resistance to change and change leaders' management of resistance. However, the case studies in both research used a very simple, predefined group structure (i.e. in Schwarz and Watson's study only one management team versus one IT implementation team; in van Dijk and van Dick's study only groups of change leaders, non-change leaders and administrative staff). The reason behind the simplicity may be that these groups were salient and moderately stable all through the IT change process. However, a key point in SIT and SCT is that the salience of groupings and categorisations emerges and varies with the context of the action/discussion taking place, and also a significant organisational IT change usually comes with changes or evolution of groups over time. For example, a management group and a project team often merge and stand together when they need to encourage a resistant group of users in an IS implementation project.

The current study attempts to not only focus on complex group structures (i.e. psychological groups within the project team and between stakeholders) but also to relate different forms of power (i.e. persuasion, authority and coercion) exercised into the dynamic grouping processes. A big challenge for this study, different from an experimental environment, can be identifying one's self-categories, which may change from event to event and at the same time integrate power processes into that grouping structure. It also needs to take into account that it is politically sensitive to ask participants to answer questions about their group belongingness when power issues are evident in their organisation.

2.6. CHAPTER SUMMARY

This literature review has explained the major theoretical underpinnings of the recent research on power relations in IT projects. The chapter has also reviewed the

corresponding IS research. Rather than being an exhaustive and taxonomic style review, this review has attempted to introduce the reader meaningfully to the key ideas and the way these ideas have been applied in research in the IS discipline. Four key themes being concerned in IT projects were discussed for drawing out themes, problems and questions leading towards what are to be studied and measured. A conceptual theoretical framework of organising the literature review has been devised to comprise three major elements of intra-organisational power. This review was followed by an introduction to a new thread of research on power and influence in social psychology, namely Turner's Three-Process Theory of Power.

As discussed above, Turner's theory presents a significant research opportunity to IS researchers. Further, the theory is moderately new, certainly in comparison to the traditional theories of social theorists reviewed above. More significantly, no other empirical research for IS implementations has been carried out using Three-Process Theory despite the theory being overtly credible and having a firm theoretical and empirical basis in SIT and SCT. The theory is tangible and intuitive and has the detailed focus in the specification of both the source of power (psychological group formation) and the processes of power that is required for it to be able to be applied to particular events in organisations and IT projects. This is not always the case with Foucault and Giddens where a broader and more societal focus often seems apparent. Possibly researchers may find that although the Three-Process Theory gives new insights, there are also some weaknesses of Turner's theory and so as challenge of the current research. Full understanding of power relations may only come when the theory is combined both with some aspects of other relevant theories including Foucault, Lukes, Giddens, Clegg, Latour (and perhaps others like French and Raven) and with some aspects related to personal characteristics and influence tactics. Thus the current research has been positioned to take up the research opportunity and challenge by utilising these ideas in an empirical study of power relations in the context of an IS implementation project.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3. CHAPTER THREE – RESEARCH DESIGN AND METHODOLOGY

3.1. INTRODUCTION

This chapter describes the methodology utilised in this research. The chapter is divided into the following sections:

- Section 3.2 presents the specified research objectives.
- Section 3.3 provides a background to the research case study. The history and specific timeline of the SS project in AsiaPac University are described. The organisational structure in which the SS project was conducted is also illustrated.
- Section 3.4 demonstrates the research philosophy, which is subjective ontology and interpretivist epistemology that supported a qualitative methodology.
- Section 3.5 describes the research strategy, which is the use of the case study research method. This section presents the three-stage research design. Research stage one – **Understanding the Theory** involved building a theoretical framework comprising Turner’s Three-Process Theory of Power with a comparative combination of other theories of power. Research stage two – **Applying the Theory** involved a longitudinal case study conducted through the theoretical framework so as to examine whether Turner’s theory would be realistic and to uncover any hidden part that had not been identified in the framework. Research stage three – **Evaluating Findings of Applying the Theory** involved reviewing and evaluating the findings by using evaluation principles.
- Section 3.6 demonstrates the techniques used in the data collection that supported the strategy of the research, which included semi-structured interviews, observation and documentation study.
- Section 3.7 describes the data analysis approach and the specific procedures, which were based on a Grounded Theory based, three-phase coding strategy,

namely open coding, axial coding and selective coding. Examples of the analytical process are illustrated.

- Section 3.8 provides the ethical considerations and presents how to establish the rigour and trustworthiness of this research by using the evaluation principles.
- Section 3.9 provides a summary of the chapter.

3.2. REVIEWING AND SPECIFYING THE RESEARCH OBJECTIVES

The research objectives of this project were highlighted previously in Section 1.3. As stated, the two overall research objectives were (1) the investigation of power relations between stakeholder groups, and within the project team during an information systems (IS) implementation, and (2) the exploration of the value of a new lens with which to view power, that is, using Turner's (2005) Three-Process Theory of Power, and to compare the findings using Turner's theory with the insights generated by the existing social theories used in IS.

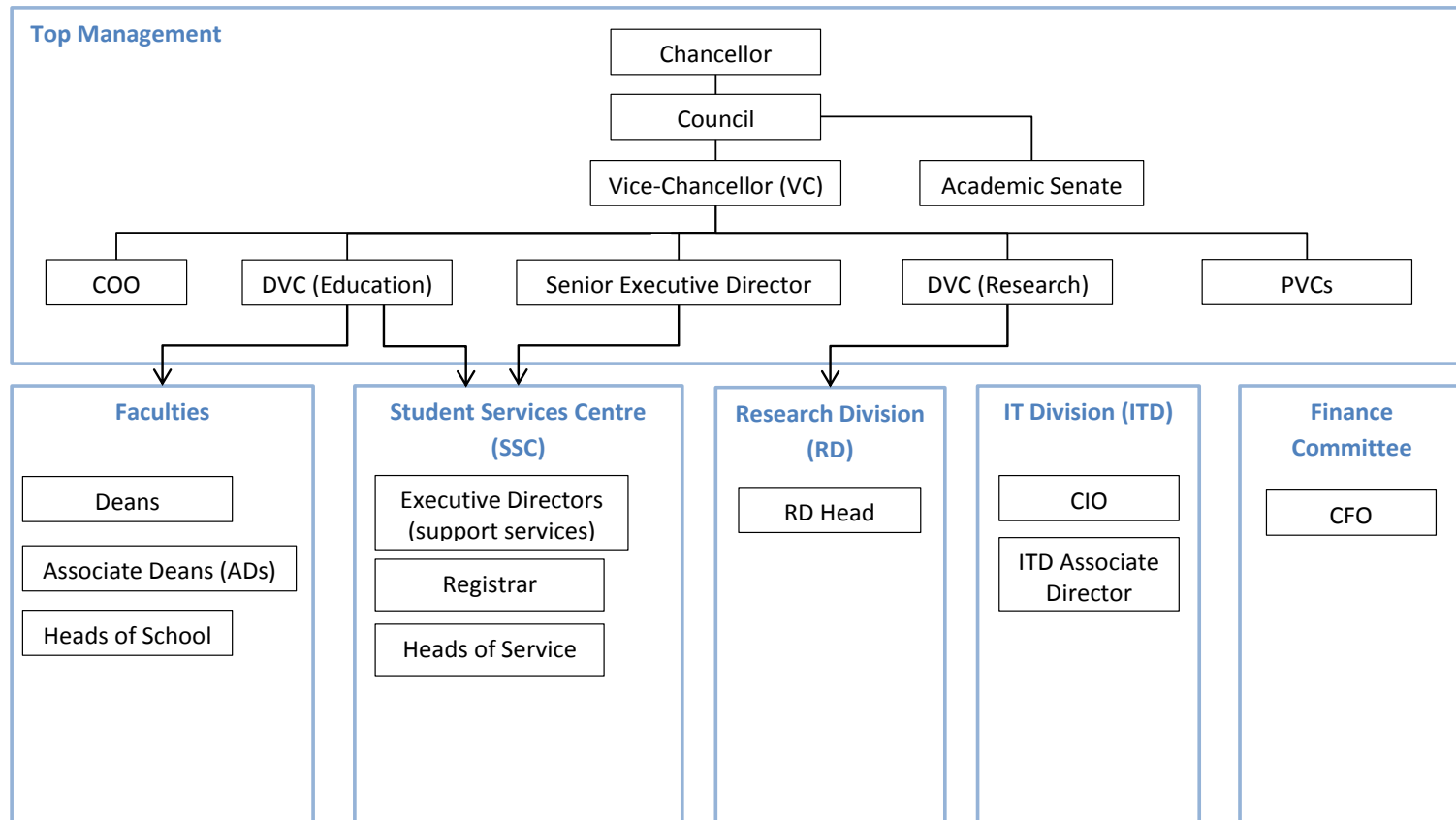
Specifically, this research focuses on the following aspects:

- The nature and sources of power, through Turner's theoretical lens, and possibly from the perspectives of other social theorists;
- The factors affecting the implementation and institutionalisation of the information technology (IT) project, particularly power relations and interplays;
- The approaches that IT project leader(s) use to resolve power-related issues;
- The work-based and non-work-based identities and psychological group formations affecting the implementation and institutionalisation of the IT project;
- The phenomena of resistance behaviours including resistance to power exercise(s) and resistance to change(s) involved in the IT project.

As stated in the previous chapter, it is important to understand the contextual and cultural environment in which the above aspects were investigated.

3.3. RESEARCH CONTEXT

The site for this research was a university in the Asia Pacific region, named as AsiaPac University (pseudonym). AsiaPac University was located in a relatively insular state and had fairly siloed organisational structure (see the organisational structure chart in Figure 3.1). The focus of analysis in the case study is the power relations and resistance behaviours throughout the implementation of a large student system (SS) that integrates approximately 150 systems covering various business areas, a core business transformation project in AsiaPac University.



COO: Chief Operating Officer; DVC: Deputy Vice-Chancellor;
PVC: Pro Vice-Chancellor; IT: Information Technology
CIO: Chief Information Officer; CFO: Chief Financial Officer.

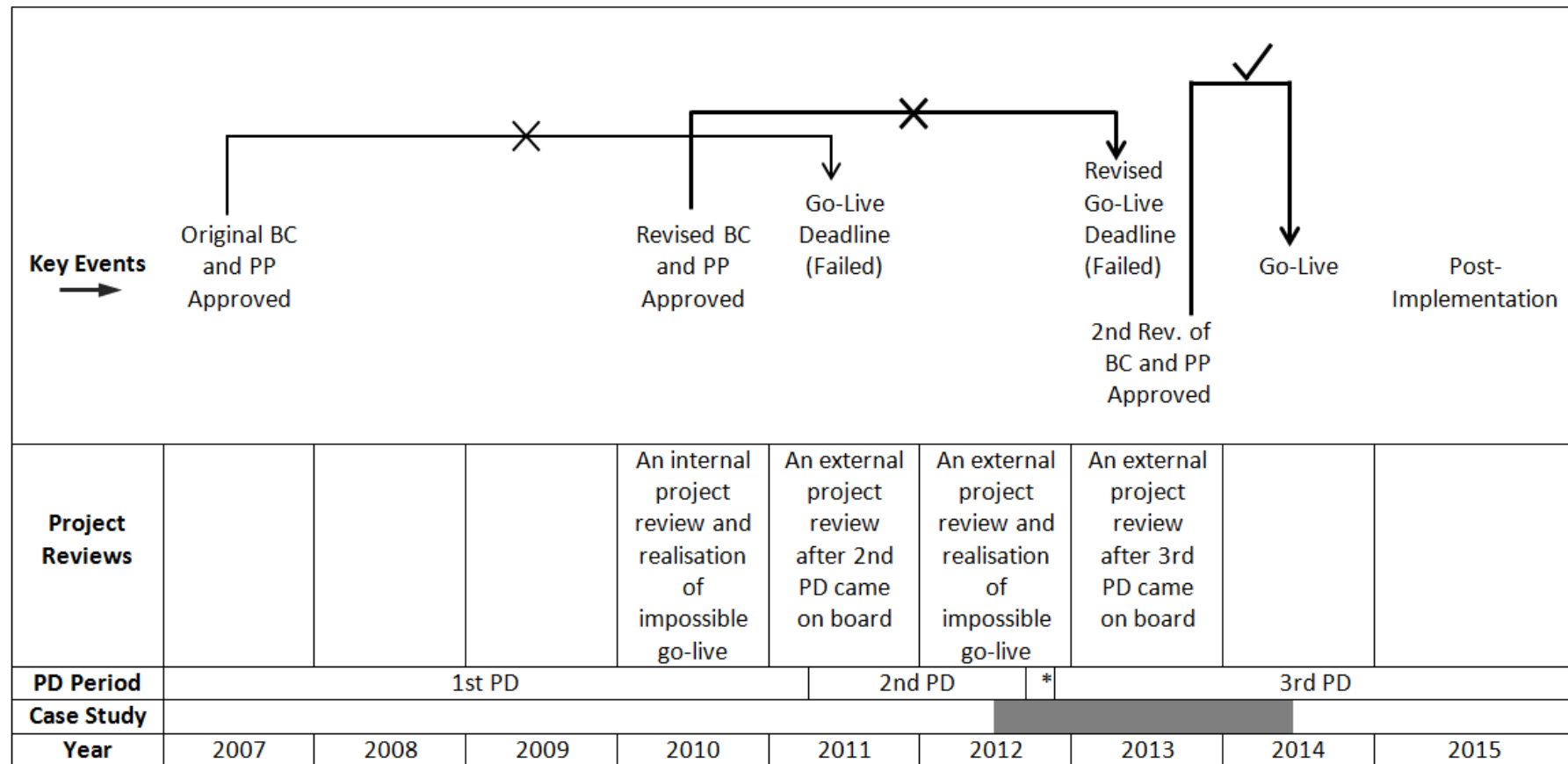
Figure 3.1 The organisational structure of AsiaPac University

In the early 2000s, there was recognition among executive management in AsiaPac University that the solutions, systems and technology that supported the core business processes were aging, and thus becoming a source of risk to the university. The university was also keen to better understand the services they needed to supply to students, and to seek efficiencies in this service delivery. The SS project was conceived as a response to these issues, and was initiated in July 2006. The objective was to assess and review options for transforming the university's approach to student and academic administration, and the systems required to support that service delivery. Thus, the project aims were broad and touched most activities and processes in the university. They included the simplification of course structures, centralised scheduling of teaching, the implementation of the new student management system, the development of a new admissions interface, the extension of web delivered services to students and staff, and the efficient management and publication of course and unit information.

In November 2007, the SS Project Steering Committee endorsed the first Business Case and approved the recommended option – to buy a commercially available student information system. The project was allocated a budget of around \$11 million and the go-live date for the SS system was June 2011 (see Figure 3.2). A project team of 11 members was assembled. The team was headed by a Project Director and assisted by a Project Manager, and a Project Administrator. Other members of the team included four business/systems analysts as well as persons responsible for database administration issues, report generation, system testing and end user training.

Early progress was slow and some problems emerged, but it was assumed that the project was progressing reasonably well. Nonetheless there were some anxieties voiced and so an external review was announced in 2010. This review was highly critical and caused shock waves in the University Council. The review reported that given the progress to date, the budget and timeline were insufficient and the project team would not be able to meet the targeted 2011 implementation timeframe. Discussions among Council members and the Vice Chancellor (VC) led to the VC replacing the Project Director after 4 years heading up the project team. It seemed to

many in the university, including those in the SS project team, that the 'moving aside' of the Project Director, was not accompanied by a rigorous level of analysis. It seemed to some in the project team that senior management had 'stamped its foot' in anger, but had not diagnosed the problems that were plaguing the project.



BC: Business Case; PP: Project Plan; Rev.: Revision; PD: Project Director;

* The period of 2nd PD's deputy being the temporary Project Director

Figure 3.2 Timeline of the SS project

The new Project Director was recruited from outside the university. He had been the Chief Executive Officer (CEO) of an online betting company, and hence he was assumed to have a reasonable business-oriented knowledge of IT systems. Critically, however, he had no experience of directing and managing large and complex IT projects. Nonetheless the second Project Director reviewed the original Business Case and had a new Business Case prepared. This second Business Case was approved in December 2010 with a new timeline, and an increased budget and resources. The new project budget was almost doubled to \$22.7 million and the project team was increased to over 30 members. Further, the new Project Director made significant changes in the project team structure. The go-live date was changed to April 2013. However, the project fared little better under the new Project Director.

The second Project Director had a remote 'CEO style' and did not tend to set clear directions for the project team leaders. His lack of hands-on project management became obvious to a number of senior members of the project team. His upward communications to the senior management in the university were reassuring and so it was another shock to the Council and the VC when a second external review of the project showed it to be in a parlous state, having no chance of meeting the planned go-live date. The second Project Director, seeing the writing on the wall, left the university.

After the second Project Director left, the Project Director's deputy took charge of the SS project with a view to her holding this position until the next Project Director was appointed. The temporary Project Director struggled to give the project team a sense of stability and progress. A number of people in the project team became disillusioned with the lack of direction and progress and left the university. Painfully aware that the project was not making progress and bedevilled by a number of fractious disputes within the project team, the temporary Project Director resigned.

In late October 2012, a new Project Director who had experienced complex projects was recruited from outside the university. The new Project Director, needing to accurately and publicly establish the current state of the project, instituted another comprehensive external review of the project and then based on the findings, argued

that the April 2013 go-live target was no longer possible. However, the senior management of AsiaPac University was now getting impatient with the retreating go-live dates and was also becoming increasingly aware of and frustrated with the inadequacies of the current legacy system and the attendant ineffective and inefficient business processes. Thus the VC brought considerable pressure to bear on the new Project Director, insisting, among other things that she meet the deadline of September 2013 as a compromise of the previous April deadline. This time however, the new Project Director was a professional and highly experienced project manager who could clearly see that the deadline was completely unrealistic and so she refused to commit to it. For a while it seemed that the new Project Director would be dismissed. During this time of uncertainty for the SS project, the VC requested that the University Chief Information Officer (CIO) get involved in the project to assess whether the deadline was in fact unattainable as the new Project Director was asserting. The CIO spoke with the project team members and was told quite firmly by a number of them that the new Project Director was correct. The upshot was that the new Project Director was placed back in charge of the project and the University Council was informed that the new Project Director's assessment of July 2014 as an approximate go-live date was now the official target date for the implementation of the new system. The new Project Director then started detailed work on the new Project Management Plan and the third Business Case based on the revision of timeline, resource and budget at the same time of working with the external review team and re-structuring the project team. By that time, the new project budget was almost doubled again to \$40 million and the size of the project team was significantly increased to over 60 members. The SS project then began to move in the right direction under the third Project Director's leadership and finally went live within the designated timeline.

This site was selected for two reasons. First, the scale and complexity of the project was larger than any other in the history of the university. The project had been troubled since its first Business Case was approved in 2007 with multiple time and budget overruns. The Business Case was revised twice as was the go-live date. Second, the political culture and governance structure of the university made it a rich

environment for examining power relations related to the implementation of the project. The richness of the environment was present in the complex power relationships and instability in decision makings in the university. Significant project structure changes also occurred, particularly to project leaders. Multiple power structure changes and the reasons behind the problems inhibiting the project were extremely interesting to the researcher as the understanding of these matters contributes to the knowledge of effectiveness management of an IT project.

3.4. RESEARCH PHILOSOPHY

According to Guba and Lincoln (1994), a philosophy has three dimensions, namely, ontology (the nature of reality), epistemology (the theory of knowledge about how the reality can be known), and methodology (the group of methods applied to a field of study). This section presents the research philosophy and introduces the ontological and epistemological positions taken by the researcher.

3.4.1. Ontology

Ontology is concerned with what a researcher sees as the very nature of the world, the nature and essence of reality. In order to define an ontological position, answers are sought for questions of 'what it is' and 'what are its implications for the research' (Mason, 2002a). The basic question to be asked in an ontological context is whether the phenomena to be investigated occur in an objective setting without human interactions, or occur only through the humans' subjective cognition, actions, and interpretations (Burrell and Morgan, 1991).

This research is an exploratory study. The ontological preference of the current research is for people's perceptions and actions informed by the organisational and social contexts within which they work and live. This ontological view, as explained by Orlikowski and Baroudi (1991), emphasises the subjective meanings that participants assign to the world around them, rather than the objective belief that the social and physical worlds exist independently of the human actors. With reference to this research, a subjective ontology is acknowledged.

The subjective ontological position allows the researcher to discover the different meanings and interpretations that each participant gives to their environment and realities. Denzin and Lincoln (2005, p. 4) use the metaphors of montage, jazz improvisation, and quilt making to describe the nature of these realities, which are “blending together, overlapping” in the form of “a pieced-together set of representations that is fitted to the specifics of a complex situation”. All of these complex ‘realities’ – different voices, different perspectives and different angles of views – are constructed and unfolded in the form of dialogical texts. It was inevitable that this research involved some level of subjectivity would be present in the research. Thus it was not appropriate that this research be undertaken based on an objective ontological assumption.

3.4.2. Epistemology

Epistemology is about the nature of valid knowledge, namely a researcher’s “theory of knowledge” (Mason, 2002a, p. 16), and how the knowledge can be obtained and demonstrated. Epistemology helps to generate knowledge and explanations about the ontological components and concepts that have been identified as central. In the metaphors used by Denzin and Lincoln (2005, p. 5), a qualitative researcher can be seen as bricoleur, as a person who assembles images into montages, as a jazz improviser, or as a quilt maker who “stitches, edits, and puts slices of reality together”.

Following Chua (1986), Orlikowski and Baroudi (1991) suggest that the three most common epistemological categories in IS research are positivist, interpretive, and critical. The epistemological stance of the current research is interpretivism. It involves representation and interpretation to the puzzle of human interactions within complex and intertwined conceptual structures (Walsham, 1995). The critical philosophy is based on the ontological existence of “deep-seated, structural contradictions within social systems” (Orlikowski and Baroudi, 1991, p. 6). Myers and Avison (2002) argue that social critique is seen as one main task of critical research, as it focuses on the oppositions, conflicts, and contradictions in contemporary society, and seeks to be emancipatory. The positivist philosophy is based on an ontology that an objective

physical and social reality exists independent of humans' knowledge of it (Darke et al., 1998). The following paragraphs will examine these in more detail.

Critical researchers believe that the ability of people to change their social circumstances is constrained by various forms of social, cultural, and political domination, even though people may consciously be trying and acting (Ngwenyama, 1991, Hirschheim and Klein, 1994). Critical theorists usually focus on the general issues of goals, values, forms of consciousness, and communicative distortions within organisations, and sometimes focus on the interests of specific identifiable groups such as women, workers, or people of colour (Alvesson and Deetz, 2005). Externally, critical studies focus on the relation of organisations to the wider society by emphasising the possible social effects of colonisation of other institutions and the domination or destruction of the public environment. Internally, critical studies focus on the domination by instrumental reasoning, discursive closures, and consent processes within the workplace (Alvesson and Deetz, 2005). Critical management studies, at the basic level, have a prevailing and persistent critical view that all management is a problematic practice and should be changed (Valerie and Chris, 2000).

Although the current research is seeking for answers to explain the reality surrounding issues or conflicts through human interactions, and as such, 'domination' could be one of the ontological elements of interest, the ontology of the current research is not based on a reality where domination will necessarily take place, and it is not the only concern for studying the problem in question. In other words, the current research is not taking a critical standpoint but an interpretive angle of vision, where the reality could be whatever is experienced and depicted by participants, and interpreted by the researcher who seeks to make the world visible. This may be positive or negative, rational or irrational, dramatic or ordinary.

Thus, the critical philosophy may be not suitable for this research project, whereas positivism and interpretivism seem to be more suitable. The next section will provide a comparison of positivist and interpretivist paradigms for choosing the more suitable philosophy for this research.

3.4.2.1. Comparison of Positivist and Interpretivist Paradigms

Positivist studies serve primarily for testing theory, and attempting to increase predictive understanding of phenomena (Orlikowski and Baroudi, 1991). Yin (1989, 2014), Lee (1989a, 1989b) and Benbasat et al. (1987) are advocates of positivist research in IS. They emphasise evaluating positivist research by deploying criteria of controlled observations, replicability, formal logical deductions, and generalisability. Large sample surveys and controlled experiments are primarily used in positivist studies, where deductive causal relationships and universal laws are generated in terms of generalisable, replicable and predictable knowledge, from the sample to a stated population, from the current context to other settings (Doolin, 1996).

The interpretive philosophy is based on ontology that the “reality is subjective, a social product constructed and interpreted by humans as social actors according to their beliefs and value systems” (Darke et al., 1998, p. 276). As Gibbons (1987, p. 3) describes, interpretive research aims to understand the intersubjective meanings embedded in social life and to explain why people act the way they do. It considers the reality and our knowledge as social products which cannot be separated from the social actors who construct and make sense of the reality (Doolin, 1996). Thus, interpretivists do not believe in the existence of absolute truth; rather, they think all truth is relative. They seek to explain meanings people ascribe to the words and actions of others, not causation.

Walsham (1993, 1995) is an advocate of interpretive in-depth case study research in IS. Walsham (1993, pp. 4-5) highlights the value of the interpretivist approach in IS research, defining it as “aimed at producing an understanding of the context of the information system, and the process whereby the information system influences and is influenced by the context”. Therefore, Walsham (1993) implies that the goal of interpretive research is to make the interpretation of the societies available in the ‘consultable’ record rather than truth or social laws. Different from positivist research relevant to distinct facts and values and factual scientific knowledge, the interpretivist approach is adopted when facts and values are intertwined and hard to disentangle.

While the positivist paradigm uses lab experiments, questionnaires and surveys to reduce phenomena to the simplest of elements, the interpretivist paradigm, with its emphasis on meaning, shows the depth and richness of reality (Easterby-Smith et al., 1991). Easterby-Smith et al. (1991) highlight the differences in key features of the two paradigms (see Table 3.1). This table illustrates the different ways that positivists and interpretivists understand social phenomena dependent of the social actors who construct and make sense of the phenomena (Doolin, 1996, Walsham, 1993).

Positivist paradigm	Interpretivist paradigm
The world is external and objective	The world is socially constructed and subjective
Science is value free	Science is driven by human interests
The focus is on facts	The focus is on meanings
Search for causality and fundamental laws	To understand what is happening
Reduce phenomena to simplest elements	Look at totality of each situation
Formulate and test hypotheses by structured instrumentation (e.g. lab experiments, questionnaire surveys)	Use multiple methods to establish different views of the phenomena (e.g. interviews, observations)
Large samples	Small samples looked at in depth or over time

Table 3.1 Comparison of positivist and interpretive paradigms (adapted from Easterby-Smith et al., 1991)

One advantage of the positivist approach is that it uses deductive strategies to discover causal relationships that can be used to predict patterns of behaviour across situations (Orlikowski and Baroudi, 1991). These patterns can then provide the basis of generalised knowledge for theory application and development, in particular, for generating qualitative insights (Levitt and List, 2007). Indeed, the findings in the social identity theories on which Turner's Three-Process Theory is built, are produced by laboratory experiments involving created scenarios and artificial grouping contexts (reported in Turner, 1978a). When considering the current exploration of Turner's theory however, an important weakness of the positivist experimental approach is its lack of ecological validity (Bronfenbrenner, 1979).

Ecological validity, that is the ability to capture authentic daily life conditions, opinions, values, attitudes, and knowledge base expressed in the natural environment (Bem and Lord, 1979, Cicourel, 1982), is an important concern in studies involving experiences and meaning-making activities. Exploration involving real life contexts is important to the application of Turner's framework where complex human relations occur. Indeed, the artificially constructed and simplified environments employed in many experimental studies are less able to reflect what takes place in real daily life settings (Cicourel, 1982). However, the direct approach of an interpretivist case study, for example, is able to enhance ecological validity as it focuses on real life issues (Darke et al., 1998), allowing us to learn about the everyday activities and beliefs of group members in the context of applying Turner's theoretical framework.

Another important advantage of the interpretivist paradigm in this research is that it allows the understanding of deeper structure of phenomena (Orlikowski and Baroudi, 1991) as well as a focus on natural social structure (Levitt and List, 2007), culture, and historical context (Darke et al., 1998). This is important because how humans act and react is dependent on their current circumstance; that is a combination of social, environmental, physical, and emotional conditions. An interpretive epistemology will enable the researcher to capture these conditions and discover the meanings behind all of these perspectives (Willis, 2007). The current research is not expected to generate scientific truth or generalisable social laws. Rather than being 'generalisable' or 'replicable' in the positivist sense, the findings of the current research are expected to be 'transferable' or 'consultable' in terms of interpretive experiences, in such a way that similar patterns of behaviours can be learned (Lincoln and Guba, 1985).

Holding to the belief that to understand the meaning of the social world one must interpret it (Schwandt, 1994), and given the focus of this research being the identification and interpretation of human relational factors affecting an IS implementation project, an interpretivist approach to undertaking the research project was adopted.

3.4.3. Qualitative Methodology

The methodology in this research is underpinned by a subjective ontology and interpretivist epistemology. Denzin and Lincoln's (2005, p. 3) definition of qualitative research illustrates the interconnections between the ontological, epistemological and methodological dimensions:

“Qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them”.

Therefore, a qualitative methodology is adopted for the current research. According to Myers and Avison (2002), the application of qualitative research has been valued with an increasing interest in the IS discipline where there has been a general shift from technical issues to managerial and organisational issues.

Denzin and Lincoln (2005) identify five differences between qualitative and quantitative research, involving different ways of addressing the same set of issues. Generally, quantitative research focuses on experimental measurement and analysis of causal relationships between variables but not processes; qualitative research emphasises processes and meanings that are different from experimentally measured data in terms of quantity, amount, intensity, or frequency. Because fulfilling the research objectives requires the assessment and interpretation of people's attitudes and beliefs, data collection and analysis by quantitative methods cannot be effective (Mason, 2002b). To build a rich picture of the research participants' beliefs and feelings regarding human interactions, a qualitative methodology is deemed more suitable for the current research than a quantitative methodology.

Further, to understand these experiences, the social and cultural contexts also need attention. No matter the methodological approach used, both quantitative and qualitative researchers are faced with explaining facts. Qualitative research is distinguished from quantitative research through its analysis by means of text or

narrative, which assists to understand and interpret the relevant social and cultural contexts behind human perceptions and actions (Myers and Avison, 2002). The current research thus lends itself to the use of a qualitative methodology enabling the researcher to explore each participant's experience in the given context.

This section has presented the research philosophy taken by the research and the reasons for the suitability of the adopted research philosophy. The philosophy underpinning the research is a subjective ontology, interpretivist epistemology supporting a qualitative methodology. The next section will present the strategy of this research.

3.5. RESEARCH STRATEGY

This section introduces the research strategy. The research strategy assists in realising the drivers behind the methods used by the researcher to explore the research questions as presented in Section 1.4.

3.5.1. Case Study

Based on the subjective ontology and interpretivist epistemology underpinning the current research, the case study research method was adopted (Ye et al., 2016). This section describes some of the commonly used examples of qualitative methods in IS research in order to justify the choice of method in the current research. Examples of commonly used qualitative methods in IS research are action research, case study research and ethnography (Myers and Avison, 2002, Conboy et al., 2012).

Action research is a combination of pure research (observation) and action (participation) (Cavaye, 1996, Rapoport, 1970). Particularly in IS research, Benbasat et al. (1987) argue that an action researcher, acts not as an independent observer, but is a participant who takes action to solve problems and to contribute to the development and/or implementation process of systems. The strength of action research is that the researcher can obtain the first-hand in-depth understanding from the site whereas the weakness lies in its lack of objectivity because an action researcher takes action in

affecting the process of achieving outcomes in the site. In the current research, the researcher did not act as a participant but acted only as an observer, independent of the implementation process in the IT project.

Ethnography arises within the area of social and cultural anthropology. In ethnographic research, an ethnographer spends an significantly extended period of time on-site across multiple sections in the fieldwork attempting to gain detailed, observational evidence, while immersing themselves in the life of the social group that they study (Myers and Avison, 2002). Ethnography is widely used in IS research in organisations, focusing on the studies of processes from design and development of information systems to the all aspects of information technology management. There are various definitions of ethnography but they tend to be descriptive. One definition is:

“When used as a method, ethnography typically refers to fieldwork (alternatively, participant-observation) conducted by a single investigator who ‘lives with and lives like’ those who are studied, usually for a year or more” (Van Maanen, 2004, p. 320).

The features of an ethnographic research are a longitudinal approach (i.e. a presence in the field for at least a year) and the use of participant observation (i.e. identified as participant(s) in the process but remain distant from the process being studied). The current research takes a longitudinal method of investigation, as it was a two-year case study. However, as mentioned previously, the researcher stayed outside the context being studied. From an interpretive perspective, the current research aims to uncover and interpret knowledge in terms of participants’ experiences and subject positions, in which the researcher is an independent observer. There is however, inevitable engagement within the field study in order to gain a deep understanding of the phenomena and reality (Orlikowski and Baroudi, 1991, Walsham, 1995).

Case study research is the most common qualitative method used in the IS discipline (Alavi and Carlson, 1992, Orlikowski and Baroudi, 1991, Yin, 2014, Avison and Pries-Heje, 2005). It is particularly well-suited for understanding the interrelationship between IT-related change and management practices in organisational context (Darke

et al., 1998, Doolin, 1996, Benbasat et al., 1987, Kling and Iacono, 1984). As Dooley (2002) argues, case studies allow researchers to understand complex issues and add knowledge and strength to the understandings of previous research. Further, case study research emphasises detailed contextual analysis of a set of power-related circumstances from which an understanding of issues can be used to inform other organisations. Specifically, there are three reasons why a case study is appropriate in this research project.

Firstly, case study research can be particularly useful when theories are not yet well tested (Benbasat et al., 1987). Case studies are also commonly used in research areas where “existing knowledge is limited” (Darke et al., 1998, p. 275). It suits the current research as it is applying a theory that is new to the IS discipline and few similar studies exist. Secondly, case study research is well suited to answer the ‘how’ and ‘why’ questions of power relations, and to understand the nature and complexity of the processes taking place (Yin, 2009). This includes problems where the experiences of the actors are important (Orlikowski and Baroudi, 1991). Such experiences and phenomena cannot be studied outside the context in which they occur (Benbasat et al., 1987, Bonoma, 1985). In the current research, the aim is to gain a deep understanding of human social relations relative to their particular context. Thirdly, case study research is appropriate when one has clear definitions of themes to be studied and the research questions are identified based on the specification of theoretical propositions (Darke et al., 1998). Based on these considerations, a case study methodology seems well suited for the purposes of the current research, to produce a rich understanding and insight into the nature and operation of power in IT projects.

3.5.2. Three Research Stage Design

The design of the current research project is based on the FMA framework proposed by Checkland and Holwell (1998), which presents the relationship of elements relevant to any piece of research (see Figure 3.3). In the FMA framework, a theoretical framework of ideas (F) is applied through a methodology (M) to investigate a problem of interest in an area of concern/application (A). In the current research, the framework of ideas (F)

comprises Turner's theory in combination of other relevant social theories (see Section 2.4 and Section 2.5, particularly the discussion in Section 2.5.3). The methodology (M) is a longitudinal case study approach carried out in the interpretivistic paradigm. The area of concern (A) is an IS implementation project (see Section 3.3), in which the specific problem of interest is power-related issues and the effective use of power in managing the IS implementation and the changes they bring with them.

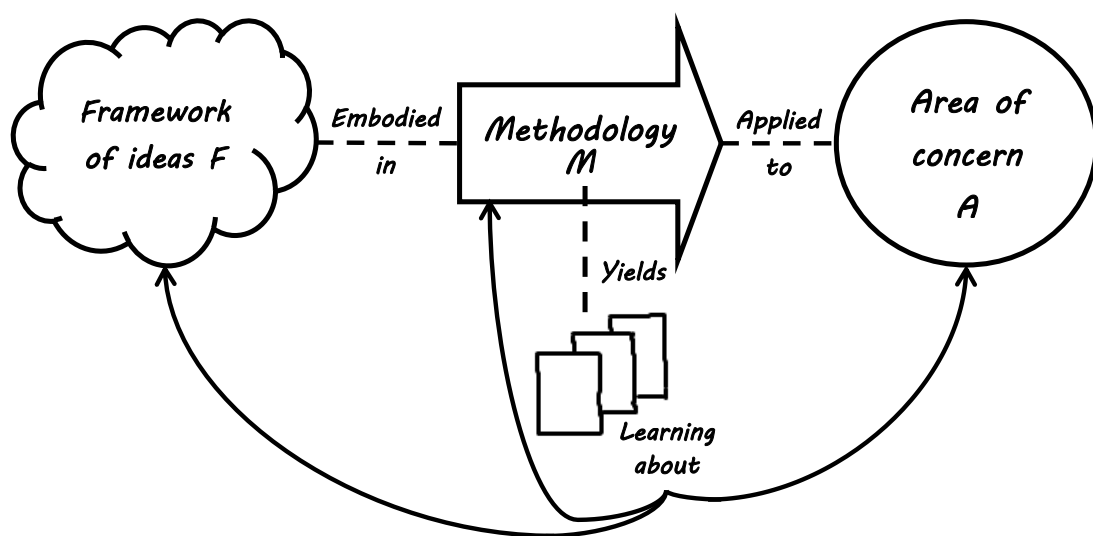


Figure 3.3 Elements relevant to any piece of research (adapted from Checkland and Holwell, 1998)

Based on the FMA framework and guided by the research philosophy (see Section 3.4) and the research strategy (see Section 3.5), the research design was arranged into three research stages; stage one – **Understanding the Theory**, stage two – **Applying the Theory** and stage three – **Evaluating Findings of Applying the Theory** (see Figure 3.4). This design links the existing literature, the methodological approach, and the research questions together into a single, coherent whole.

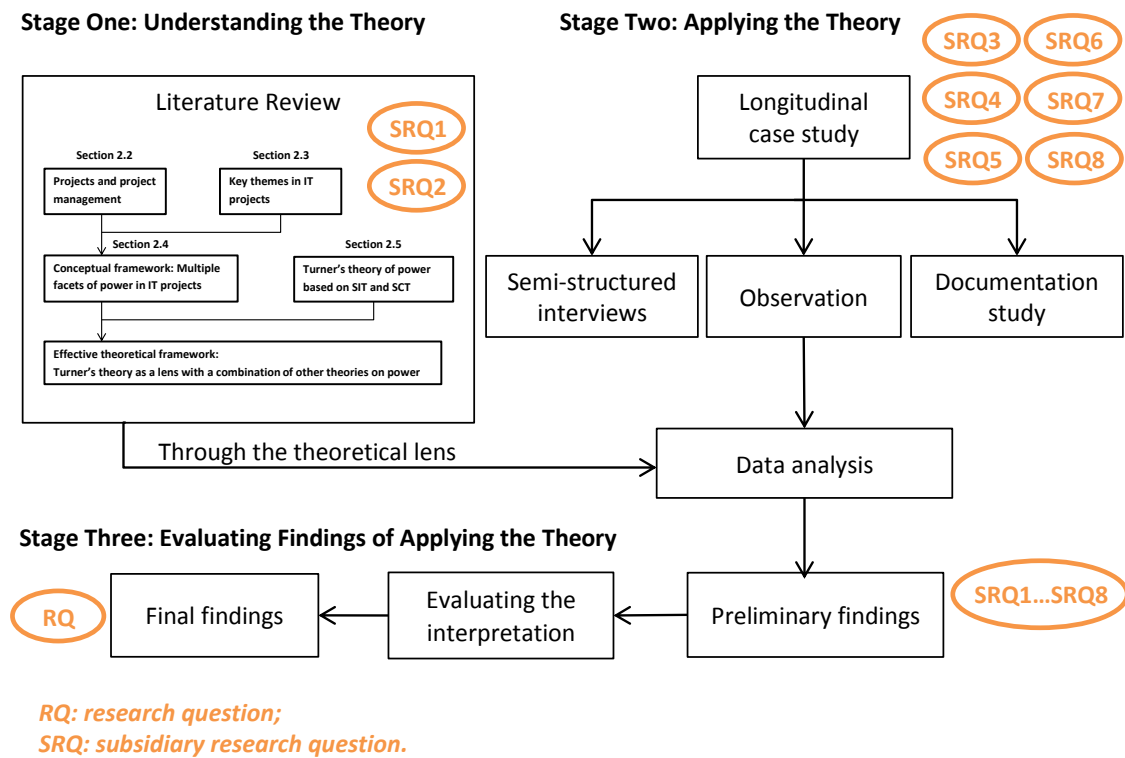


Figure 3.4 The three research stage design

Stage one – **Understanding the Theory** involved building a theoretical framework comprising Turner's Three-Process Theory of Power with a comparative combination of other theories of power, especially those which are familiar to IS audiences. The literature review in the first stage answered the following subsidiary research questions (SRQs):

SRQ1: *What are the main principles and ideas of Turner's Three-Process Theory of Power? What are the possible implications for power relations in IT projects?*

SRQ2: *What are the significant theories that have been used to understand and explain power relations in IT projects? How does Turner's theory compare with these theories? What are the significant differences?*

Stage two – **Applying the Theory** involved the longitudinal case study conducted through the theoretical lens of applying the framework so as to examine whether Turner's theory would be realistic and to uncover any hidden part that had not been

identified in the framework. The methods and techniques used for data collection and analysis will be discussed in detail in Section 3.6 and Section 3.7. At the end of the second stage, the following subsidiary research questions were answered:

SRQ3: What are the major issues and problems that affect the implementation and institutionalisation of IT projects?

SRQ4: What is the nature of power? Does power emerge from only one source (psychological group formation), or does power emerge from other sources such as the several bases as French and Raven (1959) assert in their classic paper?

SRQ5: Does an IT project leader gain influence over others in the project when they are in the same psychological group with the target(s)?

SRQ6: Does the formation of different psychological groups in organisations influence the power relations that affect the implementation and institutionalisation of IT projects?

SRQ7: Does power consist of persuasion, authority and coercion? Is power applied through processes of persuasion, authority and coercion and what is the nature of these processes?

SRQ7a: How is persuasive power gained and exercised in the management of IT projects?

SRQ7b: What role does the power that emerges from legitimate authority play in the management of IT projects?

SRQ7c: What role does coercive power play in the management of IT projects?

SRQ8: Does Turner's theory give a reasonable explanation for the phenomenon of resistance behaviours involved in IT projects?

The outcome of the second stage was the preliminary findings for applying the theoretical lens in the investigation of power relations in the IT project. During the third stage – **Evaluating Findings of Applying the Theory**, the findings were evaluated

by reviewing the set of principles for evaluating interpretive field research proposed by Klein and Myers (1999) (see Section 3.8). The final stage also included reviewing each of the research questions and answering the overarching research question.

3.5.3. Two Phase Data Collection and Analysis in Research Stage Two

During Research Stage Two, the data collection and data analysis process was conducted in two phases (see Figure 3.5). In the first phase, the matters of power relations, politics and group influence emerged from the initial data collection. Then in the second phase, noting the emergence of aspects of Turner's theory from the preliminary analysis, a more focused, theoretically informed approach was conducted in which Turner's theory was used a lens to guide subsequent data collection and analysis.

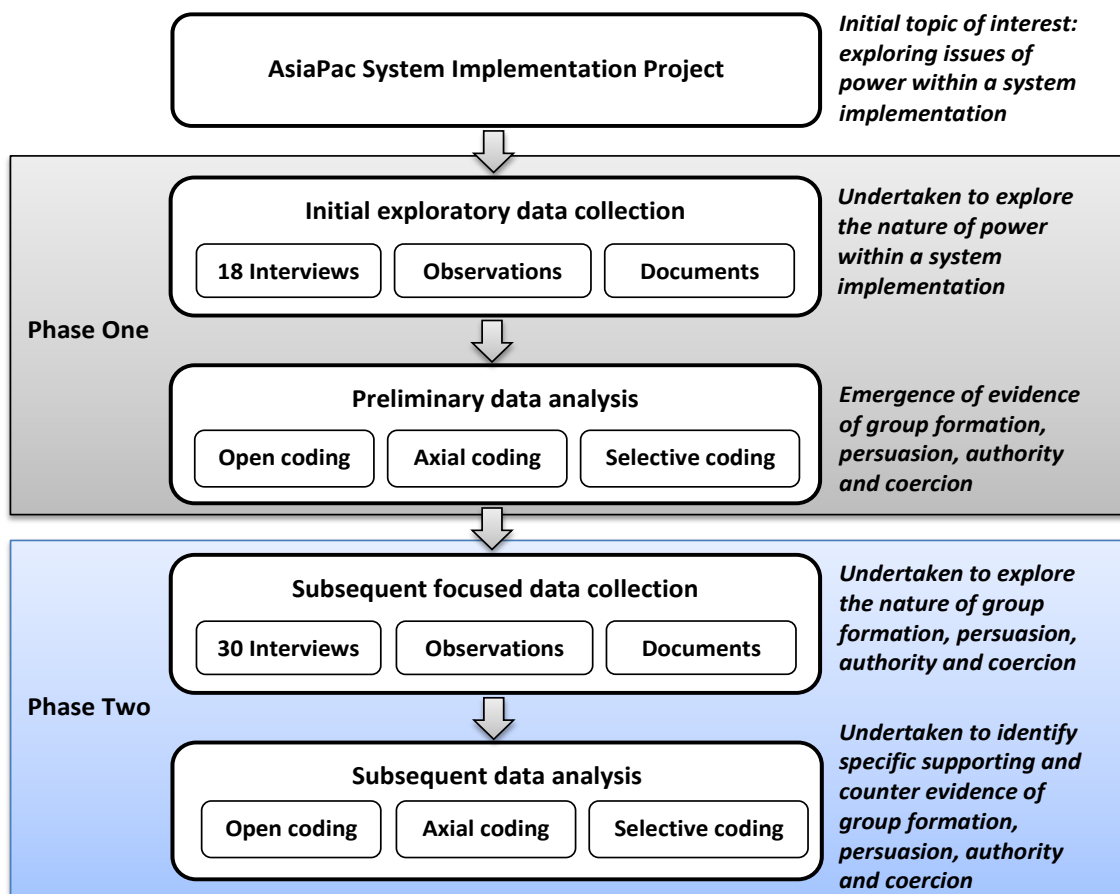


Figure 3.5 Data collection and analysis process

3.5.4. The Demographics of the Participants

Forty six participants have been interviewed among whom two project leaders were interviewed twice for further in-depth conversation. Participants have been de-identified to maintain confidentiality with the following convention adopted for labelling: SM = Senior Management, BS = Business Stakeholders (or Administrative Group), TM = IT Division Management Group, TO = Transition Support (Officers) Group, PL = Project Leaders, PM = Project Middle Management, BA = Business Analysts, TW = IT Workers and TT = Training Team (see Table 3.2). This table also presents general descriptions of each participant group's responsibilities and concerns. These profiles do not link particular characteristics to individual participants but provide a general overview of the participants as groups according to their role in the organisation. The demographical details of each participant are shown in Appendix 1.

	Key Stakeholders	Responsibilities/Concerns
Other stakeholder groups outside the SS project team	Senior Management (SM1-5) <i>(Deputy Vice Chancellors, Chief Operating Officer, Deans and Associate Deans of faculties)</i>	Increase the efficiencies of service delivery and the secure and controlled exchange of data. Finalise the implementation of the SS project with no more budget and timeline blowouts.
	Business Administrative Group (BS1-6) <i>(Heads of Service in various business areas of the university)</i>	Comply with Senior Management's desire to try out the new product of systems. Provide critical business expertise and decision making within the scope of their role in support of the SS project.

Sub-groups within the SS project team	IT Division Management Group (TM1-2) <i>(Chief Information Officer and the Associate Director in IT Division of the university)</i>	Provide IT services support to assist the implementation of the SS project. Increase credibility and recognition of IT Division from other areas of the university.
	Transition Support Group (TO1-5) <i>(Transition support staff recruited for the SS implementation)</i>	Support major organisational change and help students and staff throughout the implementation and transition phases of the SS project.
	Project Leaders (PL1-5) <i>(Project Directors, Project Managers, Assistant/Deputy Project Directors)</i>	Deliver the project against the budget and timeline with minimum risks and issues left to the post-implementation stage. Obtain more power and recognition of the importance of the SS project.
	Project Middle Management (PM1-8) <i>(Project team stream leaders, team leaders, senior consultants, Communication Manager)</i>	Follow the project leader's leadership to manage deliverables/outcomes for their team/stream against the budget and timeline.
	Business Analysts (BA1-8) <i>(Business Analysts in the project team)</i>	Follow their team/stream leader's instructions to capture business process, functional and technical requirements for the specification of project solutions.

IT Workers (TW1-5) <i>(System Programmers, System Developers, System Testers in the project team)</i>	Follow their team/stream leader's instructions to be responsible for a series of IT related tasks including requirements engineering, software design, development, testing and documentation.
Training Team (TT1-2) <i>(Training Developer, Training Agent)</i>	Provide training services to users all over the university for effectively running the implemented systems.

Table 3.2 Roles of the participants and their responsibilities/concerns

3.6. DATA COLLECTION TECHNIQUES

This section presents the data collection techniques that supported the research objectives (see Section 3.2) and the research strategy (see Section 3.5). The techniques included semi-structured interviews, observation and documentation study. These data collection techniques are detailed in the following subsections.

3.6.1. Semi-Structured Interviews

Semi-structured interviews were used as the primary source of data. Additional sources, for example observation and project related documents, were used to contextualise and confirm the researcher's understanding of data throughout the analysis phase. This was because using multiple sources of data was a key strength of the case study method (Yin, 2009). Semi-structured interviews were chosen because there were specific topics that needed to be narrowed down and covered, but at the same time the researcher wanted to hear the participants' stories (Rabionet, 2011). The format of an opening statement was used, and a few general questions were asked to elicit conversation in the interview. With a vague idea of the important issues, the researcher prepared additional questions to probe for information that may otherwise have been missed. The researcher used improvisation strategies, and

listening strategies as suggested by Myers and Newman (2007), in order to construct questions or provide prompts based on the participant's response.

The interviews ranged from 40 to 90 minutes in length. In total, 48 in-depth, open-ended formal interviews were conducted with 46 participants. Among these participants, two were heavily involved project leaders, and as such were interviewed twice for further in-depth conversation. The in-depth open-ended interviews allowed for participants' to provide lengthy and full responses and permitted unrehearsed questions and answers accordingly. As this research is interpretative in nature, it is the participant's perceptions, experiences and reactions that are of a concern. Therefore, the interviews were delivered face-to-face, except for one telephone interview. Each of the 47 face-to-face interviews was recorded by using a digital audio voice recorder, and written-notes were recorded by the interviewer during the telephone interview.

During data collection Phase One and Phase Two, 18 interviews and 30 interviews were conducted respectively. Some examples of interview questions for data collection in Phase One – **initial exploratory data collection** and Phase Two – **subsequent focused data collection** are presented in Table 3.3. The interview questions during the first data collection phase were general questions concerning the major issues and problems affecting the IT project. With the emergence of power-related issues in line with Turner's theoretical lens, the second data collection phase involved more focused questions through the theoretical lens. Table 3.3 shows how the principles of Turner's theory informed the interview questions during the second phase, and further, how the principles and the interview questions related to the research questions that were answered.

<i>Data collection phase</i>	<i>Principle of Turner's theory</i>	<i>Example of interview questions</i>	<i>Related subsidiary research questions (SRQs)</i>
Phase one – initial exploratory data collection	Not applied	<p>Describe the project as you see it, giving the objectives and expected costs and benefits.</p> <p>Is this project important to you? Why, and for what reasons and in what ways?</p> <p>Explain any problems, issues and challenges with this project.</p> <p>Is the project being run and communicated in a participative way?</p> <p>Describe the key IT stakeholders explaining their decision making role and how they are affected by the project.</p> <p>What is your role in this project? Are you satisfied with the current situation regarding different aspects of the project?</p> <p>Describe the management style of the project leaders and managers.</p>	SRQ3: What are the major issues and problems that affect the implementation and institutionalisation of IT projects?

Phase two –
**subsequent
focused data
collection**

1. People tend to self-categorise into psychological group(s) and these self-categorisations become relevant in determining behaviours in particular contexts or situations.

My research is applying a theory (...). In your opinion, could you describe psychologically different groups in this project and which group do you perceive that you are belonging to?

SRQ4: What is the nature of power? Does power emerge from only one source (psychological group formation), or does power emerge from other sources such as the several bases as French and Raven (1959) assert in their classic paper?

SRQ5: Does an IT project leader gain influence over others in the project when they are in the same psychological group with the target(s)?

SRQ6: Does the formation of different psychological groups in organisations influence the power relations that affect the implementation and institutionalisation of IT projects?

2. Psychological group formation produces a situation of mutual influence through a shared identity which forms the basis of power through persuasion.	<p>In your opinion, do you perceive easier influence and persuasion from your group members and the other group(s)?</p> <p>Could you give an example of a situation in which you were persuaded to take some action or adopt some idea related to the project?</p>	SRQ7a: How is persuasive power gained and exercised in the management of IT projects?
3. Authority is the power based on in-group norms that group members ought to follow a specific person or position (leader) that has the right to control them in certain matters.	<p>Describe the main communication approaches of the project leaders. Have communications in this project been effective and why?</p> <p>What control and decision making power do you have with respect to this project? Are you satisfied with the current situation regarding these aspects of the project?</p> <p>Could you give an example of where you accepted an order from a leader because you thought they had the legitimate right to ask you, in the context of the project, to do something?</p>	SRQ7b: What role does the power that emerges from legitimate authority play in the management of IT projects?
4. Coercion is the power to control a target against their will through the deployment of resources to constrain and manipulate their behaviour.	<p>Was there any conflict or power issue between different groups? If any, what kind of power-related approach was ever used or managed to deal with the issues?</p> <p>Could you give an example of coercion in the context of the project, where someone ordered, or tried to order you to do something that was not reasonable or not within the ambit of their legitimate authority as a leader?</p>	SRQ7c: What role does coercive power play in the management of IT projects?

5. Resistance can be understood as a response to perceived coercion to an extent or a perceived threat to the psychological group identity that people wish to retain.

Was there resistance to the implementation of the system and to the associated organisational change in this project? If yes, what were the causes of this resistance do you think? Do you regard the resistance as legitimate? Do you feel that the users regarded the authority and actions of the project leaders as justified and legitimate? If not, why not?

Did you react and resist to the coercive action (when coercion was perceived)? If yes, how did the resistance happen and how successful was the resistance?

SRQ8: Does Turner's theory give a reasonable explanation for the phenomenon of resistance behaviours involved in IT projects?

Table 3.3 Examples of interview questions for data collection phase one and two

3.6.2. Observation

Observation was a secondary data collection tool employed to supplement the interviews as the primary data source. The research questions guided the focus of the observations conducted by the researcher. Gold (1958), and later McCall and Simmons (1969) identify the following four different modes of observation that may be used in data collection:

- the complete participant, who takes an insider role as part of the social setting that is studied;
- the participant-as-observer, who has access to the setting by naturally being part of the setting;
- the observer-as-participant, who has minimal involvement in the setting but is not naturally part of the setting; and
- the complete observer, who is not part of the setting at all.

The current research project deployed the complete observer mode of observation because the researcher intended to maintain a distance from the observed events in order to avoid influencing them.

During each data collection phase, the participants perceived the researcher to be a complete (or non-participant) observer in formal project meetings and project-related events. Ten project meetings and three user workshop sessions were attended by the researcher. Some project meetings were recorded with permission. During these activities, the researcher also wrote observations in note form on site and then transferred and expanded on the hand written observations from the exercise book to the pro-forma after returning to private environment.

Observation was also employed as a tool by the researcher during the formal interviews and informal discussions with the project team members. After each interview and informal discussion, once returning to a private environment, the

researcher wrote the observations and completed the field note pro-forma. These field notes also include a reflective diary and a factual event listing in order to provide additional assistance in contextualising and interpreting the data. An example of a field note is shown in Appendix 2. The observations and field notes assisted to provide depth in both the analysis and interpretation of the interview data.

3.6.3. Documentation Study

In addition to data collected through the interviews and observations, the project related documents in the case study were collected as an additional source of data to inform the research. Primary documentation was provided by some project managers and other project team members including Project Plans, Business Cases, Project Team Structure diagrams, meeting agendas and meeting minutes. Secondary documentation was obtained from the publicly available resources on the university website including the monthly issues, presentations and demonstrations for users and project news. These sources complemented the data from the interviews and observations by contextualising and confirming the researcher's understanding of data throughout the analysis phase.

According to Bowen (2009), this use of documentation can constitute a rich source of insight into the context within which research participants operate. Such insight can help researchers understand the historical roots of specific issues and can indicate the conditions under which the issues are taking place.

3.7. DATA ANALYSIS TECHNIQUES

The recordings from each interview were transcribed line by line and written notes were read through in order to understand participants' interpretation of events. Data analysis involved close reading of interview transcripts, field notes and documents, which led to the development of a rich understanding of descriptions of key political events in the research site. Once the interview transcripts were finalised, they were placed into individual Microsoft Excel worksheets for data analysis.

Given the research data being qualitative in nature (see Section 3.4.3 and Section 3.7) and requiring a subjective ontological (see Section 3.4.1) and an interpretive epistemological research philosophy (see Section 3.4.2), the data was analysed using a Grounded Theory based three-phase coding strategy (open, axial and selective coding). This strategy allowed the researcher to identify major themes in the case with extractions of supporting quotations (Creswell, 1998, Strauss and Corbin, 1990, Strauss and Corbin, 1998, Glaser, 1978, Glaser, 1992). The three-phase coding technique also allowed the researcher to deconstruct the data for groupings that could be understood to add knowledge to the understandings of previous theory and research (Maxwell, 1996). This data analysis strategy was used for both the initially and subsequently collected data. This section provides the explanation of the data analysis approach theoretically, followed by the actual procedures with examples for each of the three coding phases.

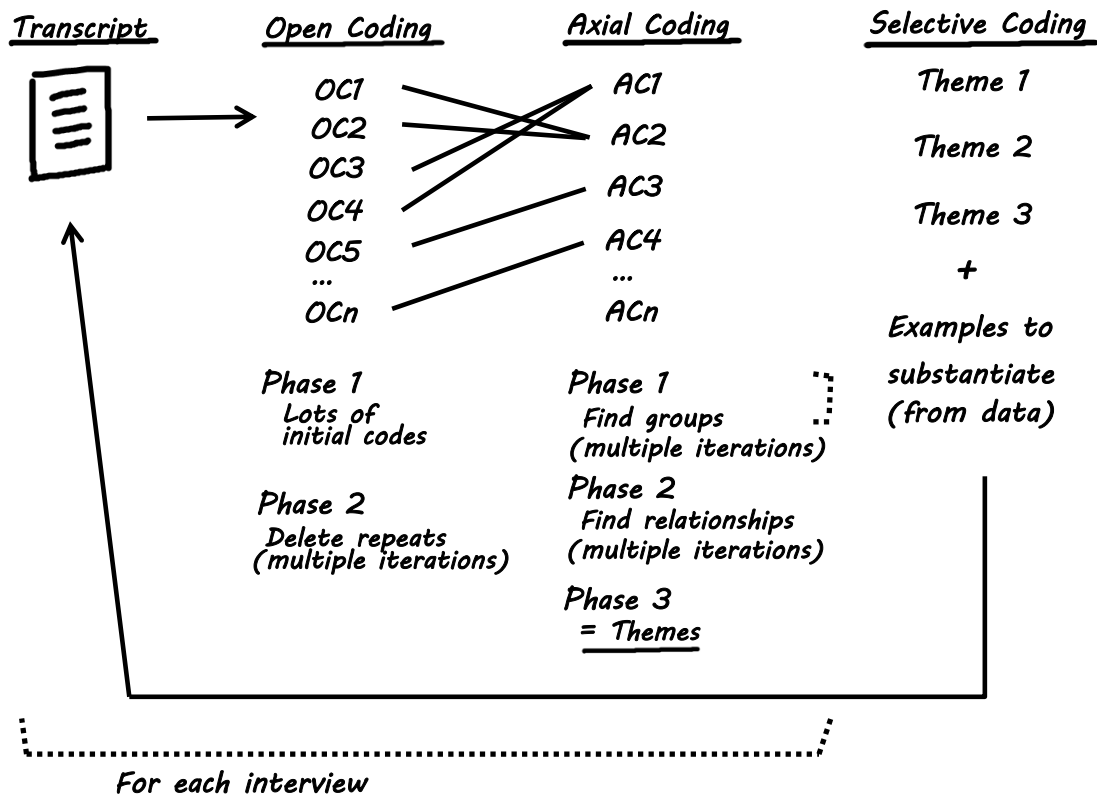
3.7.1. Theory of Analysis

Grounded Theory has been a popular research method within the IS discipline (Urquhart and Fernandez, 2013). The data analysis approach for this research incorporates a coding paradigm that is adapted from Creswell (1998) who developed the paradigm based on Grounded Theory.

Grounded Theory principles assisted to provide the framework to commence the coding process (Glaser, 1978, Glaser, 1992). This coding process included three conceptual coding levels: open, axial and selective. Open coding included an inductive coding process from the raw data and axial coding used the process of relating codes to each other until themes emerge. Following the emergence of themes from the data categories and sub-categories, selective coding was carried out as the final phase of data analysis by taking note of the social behaviours and activities that were in the coded data set; how the coded data represented the emerged themes, and further, how the themes and the data set could answer the research questions (Creswell, 1998).

3.7.2. Data Analysis Procedures

In this sub section, the procedures of data analysis are presented. Figure 3.6 illustrates the three coding phases of analysis undertaken. Each of these phases will be described in detail in the remainder of this sub section.



OC: open coding; AC: axial coding.

Figure 3.6 Three phase coding process (based on Creswell, 1998)

3.7.2.1. Open Coding

Open coding is defined by Strauss and Corbin (1990, p. 61) as “the process of breaking down, examining, comparing, conceptualising and categorising data”. This coding phase was the first pass through data where each interview transcript and relevant information was read line by line and each phrase was labelled with initial codes which were the central ideas and concepts presented in the data (Creswell, 1998, Strauss and

Corbin, 1998). This line-by-line approach aimed to reduce data to manageable categories to facilitate further analysis of data. As detailed in Figure 3.7, the initial codes were referenced to the interview transcript through line numbers.

Line (n)	
	<i>budget waste for busywork</i> <i>volumes of busywork</i>
348	There was quite a heavy burn of the budget , but there just didn't seem to be milestones that
	<i>lack of project progress</i>
349	would be reached where you could look at something tangible and say 'yes, we've done this
	<i>lack of senior management attentiveness</i>
350	and so on'. So in that sense, the concern also was that the Steering Committee had become
351	quite remote and they didn't take the level of interests that they should have done.

Figure 3.7 An example of interview transcript with initial codes identified

The initial coding was followed by iterations of removing duplicated codes as identified in Figure 3.6. The initial codes were labelled as open codes v1. The first iteration was sorting and removing duplicated initial codes that were completely identical. This iteration generated open codes v2. The following iterations involved the removal of duplicated open codes v2 that were not literally identical but shared the same meaning. Table 3.4 below provides an example that illustrates the iterations from the open codes v2 to the final open codes.

Open codes v2	Open codes (sorted)
Antagonism between business and project	Antagonism between business and project
Associate Dean as a persuader for senior academic engagement	Associate Dean as a persuader for senior academic engagement
Business engagement improvement	Business engagement improvement
○ Challenge in overcoming change resistance	● Lack of business engagement
Ex-business project staff undervalued by project leaders	Ex-business project staff undervalued by project leaders
● Lack of business engagement	Lack of project engaging with business
● Lack of business engaging with project	∴ Underestimation of project complexity
Lack of project engaging with business	University culture being too bureaucratic
∴ Poor understanding of project complexity	University culture was too meeting-driven
∴ Project complexity was underestimated	○ Issue of user resistance to change
University culture being too bureaucratic	
University culture was too meeting-driven	
○ User resistance to change	

Table 3.4 Iterations of open codes

During this process, after any duplication of codes was removed, the open codes were copied and transferred to a new column in the same Excel worksheet for the interview transcript and were sorted alphabetically before the next iteration, however links to their original source was maintained. Once the researcher felt confident that the initial interpretations were consistent with the true meaning of the data and there was no more duplication of codes to be removed, these final open codes were copied and transferred to a new column for the next phase of the analysis procedure.

3.7.2.2. Axial Coding

Axial coding involves the determination of associations and relationships between open codes of naming and categorising the phenomena through close examination of the data (Creswell, 1998, Strauss and Corbin, 1998). The axial coding was the second pass through data, which examined and refined the open codes and linked categories of the open codes together. This coding phase involved firstly finding groups of the

codes and then finding relationships between the groups, each of which went through a number of iterations, as identified in Figure 3.6.

The open codes were initially compared with each other and grouped into categories. This grouping process went through one or two iterations and was carried out within the individual Excel worksheet for each interview transcript (see the detailed example in Table 3.5 below).

Open codes	Axial codes v1 (first iteration)
Accepting authority of project superior	Management strategy within project team
Antagonism between business and project	Example of stakeholder conflict
Associate Dean as a persuader for senior academic engagement	Example of persuasion strategy for stakeholder engagement
Business engagement improvement	Stakeholder communication improvement
Ex-business project staff undervalued by project leaders	Example of project team conflict
Issue of user resistance to change	Issue of user resistance to change
Lack of business engagement	Lack of business-project engagement
Lack of project engaging with business	Lack of business-project engagement
Underestimation of project complexity	Underestimation of project complexity
University culture being too bureaucratic	Negative perception of university culture
University culture was too meeting-driven	Negative perception of university culture
Axial codes v1 (sorted)	Axial codes v2 (second iteration)
Example of persuasion strategy for stakeholder engagement	Persuasion strategy for stakeholder engagement
Example of stakeholder conflict	Stakeholder conflict
Issue of user resistance to change	Issue of user resistance to change
Lack of business-project engagement	Poor stakeholder engagement
Management strategy within project team	Management strategy within project team
Negative perception of university culture	Perceived negative university culture
Stakeholder communication improvement	Stakeholder communication improvement
Underestimation of project complexity	Underestimation of project complexity

Table 3.5 The initial grouping iterations for each interview

After the initial grouping iterations, the sorted axial codes v2 from all the interviews were copied and put together into a separate Excel worksheet with reference to their source worksheet. After removing duplication and sorting these codes, the researcher continued to categorising and at the same time finding relationships between categories and sub-categories (see details in Table 3.6). For example, the axial code v3 ‘persuasion strategy between stakeholders’ can be seen as a solution or a reason for explaining how the stakeholder relationship was changed from ‘stakeholder relational issue (e.g. poor stakeholder engagement)’ to ‘stakeholder relationship improvement (e.g. stakeholder communication improvement)’.

Axial codes v2 (sorted)	Axial codes v3 (third iteration)
Issue of user resistance to change	Stakeholder relational issue
Management strategy within project team	Management strategy within project team
Stakeholder conflict	Stakeholder relational issue
Persuasion strategy for stakeholder engagement	Persuasion strategy between stakeholders
Poor stakeholder engagement	Stakeholder relational issue
Perceived negative university culture	Stakeholder relational issue
Stakeholder communication improvement	Stakeholder relationship improvement
Underestimation of project complexity	Non-human-relational factor slowing project
Axial codes v3 (sorted)	Axial codes v4 (fourth iteration)
Management strategy within project team	Project team human relational facilitator
Non-human-relational factor slowing project	Non-human-relational inhibitor
Persuasion strategy between stakeholders	Stakeholder human relational facilitator
Stakeholder relational issue	Stakeholder human relational inhibitor
Stakeholder relationship improvement	Stakeholder human relational facilitator
Axial codes v4 (sorted)	Sub-themes (fifth iteration)
Non-human-relational inhibitor	Non-human-relational inhibitor
Project team human relational facilitator	Project team relationship
Stakeholder human relational facilitator	Stakeholder relationship
Stakeholder human relational inhibitor	Stakeholder relationship
Sub-themes (sorted)	Themes (sixth iteration)
Non-human-relational inhibitor	Non-human-relational factor affecting the project

Project team relationship	Human relational factor affecting the project
Stakeholder relationship	

Table 3.6 The continuous grouping and relating iterations for all interviews

These relationships represent links between codes in the research situations and explain what was going on (Creswell, 1998, Strauss and Corbin, 1998). This process of determining the associations and relationships went through a number of iterations until themes emerged when relationships between the codes could not be found any further.

3.7.2.3. Selective Coding

Selective coding is described by Creswell (1998) as the phase of identifying a story line and writing a story that explain the themes emerged from the axial coding and presenting the relationship between the data and conditional propositions so as to answer the research questions. This phase required the researcher to re-read the raw data and to find out what the participants talked about each theme, as identified in Figure 3.6. In this way, the themes were related to the story line. Thus in this phase the researcher considered the following questions:

- What did people talk about the theme?
- Was it in line with the theoretical lens?
- What were the specific supporting or counter examples?

The consideration of these questions guided the selective process which in turn enabled the researcher to answer the overarching research question: What level of understanding and what insights are provided by using Turner's Three-Process Theory of Power as a theoretical lens to investigate power relations in IS implementation projects? The major themes with extractions of the related quotations from the data formed the basis for reporting the data analysis findings (see Chapter 4) and for the further interpretation (see Chapter 5).

3.8. RIGOUR AND TRUSTWORTHINESS OF THE RESEARCH

Qualitative research is viewed as a political and ethical activity involving issues of representation and legitimisation. In research using the interpretivistic paradigm, the representation issues are recognised to be the “difference between writing and fieldwork” (Denzin and Lincoln, 2005, p. 19). Due to the sensitivity of the current research focus, concerns were raised in relation to how the voices of the participants might be represented appropriately and ethically, and how to provide reliability and authenticity.

Dowling (2010) emphasises that qualitative methods may involve invading participants’ day-to-day lives. Power relations and subjectivity exist between the researcher and the participant during the qualitative research process, as the researcher has control of participant selection and recruitment, data identification and usage. A qualitative researcher needs to be aware of ethical risks and potential issues, and must be prepared to identify and resolve ethical dilemmas when they arise.

The research was approved by the Human Research Ethics Committee (HREC) Tasmania, Ethics Reference Number: H0012221 (see Appendix 3). All interview materials were treated with the utmost confidentiality. All hard copies of the consent documentation and data/information collected were kept private in a locked filing cabinet in the office of the researcher. Soft copies were stored electronically on a password-protected drive on the computer server of the school that the researcher belonged to.

A project at AsiaPac University (pseudonym) was identified as being suitable for the study of power relations in IT projects. The key leaders of the project were contacted by email and provided with information about the study. Once the study was approved to be carried out within the project, interviews were arranged with the project leaders. During these interviews, documents were handed over and a list of potential participants was provided. The researcher contacted potential participants by email. The participants were provided with detailed information surrounding the study. The Participant Information Sheet (see Appendix 4) and Consent Form (see Appendix 5)

were included in the email sent to the participants. If there was no response after two weeks, the participant was contacted by telephone. Once participants agreed to take part in the study, a time for an interview was arranged. Signed consent forms were returned to the researcher either by email (for those participating by video conference or telephone) or in face-to-face interviews. Participants were free to withdraw from the study at any time and for any reason without prejudice.

In order to establish rigour and trustworthiness in the research process and therefore the findings, the current research drew upon the set of principles for evaluating interpretive field research proposed by Klein and Myers (1999) (detailed in Table 3.7 below).

Klein and Myers' criteria	Application to the current case study
<p>1 The Fundamental Principle of the Hermeneutic Circle:</p> <p>Researchers conducting case research in the hermeneutic interpretive tradition should engage in a process that all human understanding is achieved by iterating between considering the interdependent meaning of parts of that whole that they form.</p>	<p>The researcher developed an initial understanding of the power relations within the related contexts, and then revised and developed the understanding of the power-related stories by incorporating participants' feedback when appropriate. This allowed the researcher to clarify and validate the relationship between the initial theoretical framework and the data, through revising language and eliminating confusion about concepts that were emerging from the analysis.</p>
<p>2 The Principle of Contextualisation:</p> <p>For interpretations to make sense, the researcher must account for the social and historical background of the case.</p>	<p>The historical and social contexts were important in relation to the emergence of the project issues and were incorporated into the study's case narrative and analysis (detailed in Chapter 4).</p> <p>The researcher was a non-participant observer in the case study, not actively involved in the implementation project.</p>

3 The Principle of Interaction Between the Researchers and the Subjects:

The researcher must critically reflect on how the data were socially constructed through the interaction between the researcher and participants and the participants play an active role by offering their interpretations of events.

While the questions asked by the researcher might have introduced the participants to power and political concepts, shaping to some degree the responses they provided, the participants played an active role by offering their interpretations of events.

The researcher selected the documentary materials that would complement the data of the interview transcripts.

4 The Principle of Abstraction and Generalisation:

This involves generalising particulars to abstract categories and social theories.

These general concepts describe the nature of human understanding and social action.

Theoretical concepts from the lens were utilised in the field work through the use of an interview guide. They were also reflected in the analysis (see Chapter 4) and discussion (see Chapter 5).

The research findings provided illustrations of the theoretical concepts and the application of the theoretical framework facilitated transferring particulars to abstract concepts of social theories.

5 The Principle of Dialogical Reasoning:

This requires sensitivity to possible contradictions between the theoretical concepts employed in the study and the actual findings.

The researcher acknowledged that the participants could have had prejudices against the researcher and vice versa. Documentation analysis and observations were conducted to confirm the researcher's understanding of data throughout the data analysis process.

The researcher augmented the original conceptions of the theoretical lens by comparing and contrasting the Turner's theoretical lens with other existing social theories during the interpretations.

6 The Principle of Multiple Interpretations:	The theoretical lens adopted provides explanations for why different stakeholders may have different interpretations. They are posited to result from differences among stakeholders' perceived social group identities, group membership and vested interests.
This requires that the researcher be sensitive to possible differences in interpretations among the participants as are typically expressed in multiple stories of the same sequence of events under story.	The secondary data collection sources played a crucial role in providing with multiple interpretations regarding particular project events.
7 The Principle of Suspicion:	The researcher interviewed different types of project stakeholders. Attention was paid to how different stakeholders had different interpretations and how these reflected their particular interests.
This requires that the researcher be sensitive to participants' biases and systematic distortions of events stemming from their desired objectives and positions within the organisational context.	

Table 3.7 Application of Klein and Myers' evaluation criteria to the current case study

3.9. CHAPTER SUMMARY

The chapter has firstly reviewed and specified the research objectives, and is followed by the description of background to the research case study, the SS implementation project in AsiaPac University. The project history and specific timeline have been described, as well as the organisational structure in which the SS project was conducted.

The researcher has determined and justified the philosophical position of this research. The use of a qualitative approach that underpinned the subjective ontological and interpretivist epistemological perspectives was suitable for the exploratory nature of this research. The research strategy was the use of case study research method. The research design consisted of three research stages: Understanding the Theory, Applying the Theory and Evaluating Findings of Applying the Theory. The second research stage involved two phases of data collection and data analysis. This design

was guided by the research philosophy and strategy and enabled to support the different focuses of research stages and data collection/analysis phases.

The chapter has demonstrated the techniques and procedures for the collection and the analysis of data. The data collection was based on semi-structured interviews, observation and documentation study. The data analysis section illustrated the application of the three-phase coding strategy. The analysis resulted in the emergence of final themes and relating the themes to data. This process was followed for both data collection and data analysis phases.

The chapter has presented the method used to establish the rigour and trustworthiness of this research. The evaluation used for this research draw on Klein and Myers' (1999) set of principles.

The next chapter presents the data analysis and findings of this research.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4. CHAPTER FOUR – DATA ANALYSIS AND FINDINGS

4.1. INTRODUCTION

This chapter presents the data analysis and findings. The previous chapter *Research Methodology and Design* outlined the process of iterative data collection and analysis which led to the identification of two core themes relevant to the research objectives. This chapter continues the discussion by providing deeper insight into the analytical development of the themes and sub-themes, and offers insight into these themes and sub-themes from the perspectives of the case study participants. Specifically, the chapter is divided into the following sections:

- Section 4.2 presents a brief introduction to the two core themes *Human Relational Factors Affecting the Project* and *Non-Human-Relational Factors Affecting the Project*. The first theme consists of two sub-themes *Project Team Relationships* and *Stakeholder Relationships*.
- Section 4.3 and Section 4.4 presents the two sub-themes of the first theme. The categories and the relevant axial codes under each sub-theme are discussed and the relation of examples of open codes to each axial code is described with extracting direct quotations from the interview transcripts. Where there is a rich picture of power interplays, episodes and the details of the context within which they were enacted are outlined and analysed.
- Section 4.5 presents the second theme *Non-Human-Relational Factors Affecting the Project*, which is not the major focus of the current research project but can provide contextual information for understanding the first theme *Human Relational Factors Affecting the Project*. The categories and the relevant axial codes and open codes were also outlined and discussed, by extracting statements that were made directly by the participants.
- Section 4.6 provides a summary of the chapter.

4.2. THEMES: HUMAN AND NON-HUMAN-RELATIONAL FACTORS AFFECTING THE PROJECT

With the application of the three-phase coding strategy (specified in Section 3.7), two themes emerged, namely, *Human Relational Factors Affecting the Project* and *Non-Human-Relational Factors Affecting the Project* (see Figure 4.1).

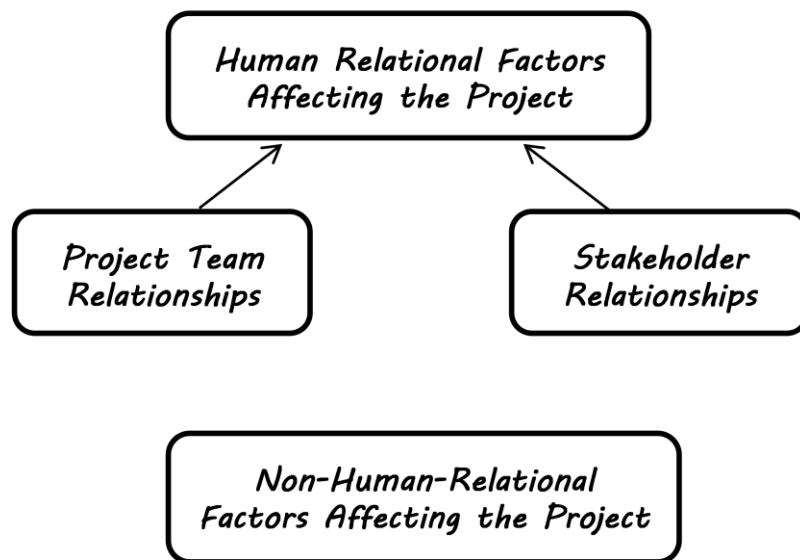


Figure 4.1 Themes and sub-themes

The first theme *Human Relational Factors Affecting the Project* is the primary focus of this research project whereas the second theme *Non-Human-Relational Factors Affecting the Project* is helpful for contextualising and understanding the human relations. Under the first theme, there are two sub-themes: *Project Team Relationships* and *Stakeholder Relationships*. The next two sections provide a detailed discussion of the two sub-themes including the relevant categories, axial codes and the interrelationships among them. The second theme will be discussed in the subsequent section.

4.3. SUB-THEME 1 OF THEME 1: PROJECT TEAM RELATIONSHIPS

As identified in Section 1.3 and Section 3.2, this research project aims to not only focus on the power relations between project stakeholder groups but also draw on the intra-project team power relations. Through the iterative process of data collection and analysis discussed in the previous chapter, the intra-project team human relational factors that affected the project progress were discovered. These intra-project team human relational factors have been coded as the sub-theme *Project Team Relationships*. Figure 4.2 below illustrates the sub-theme *Project Team Relationships* and the analytic categories that have been identified as significant to this sub-theme.

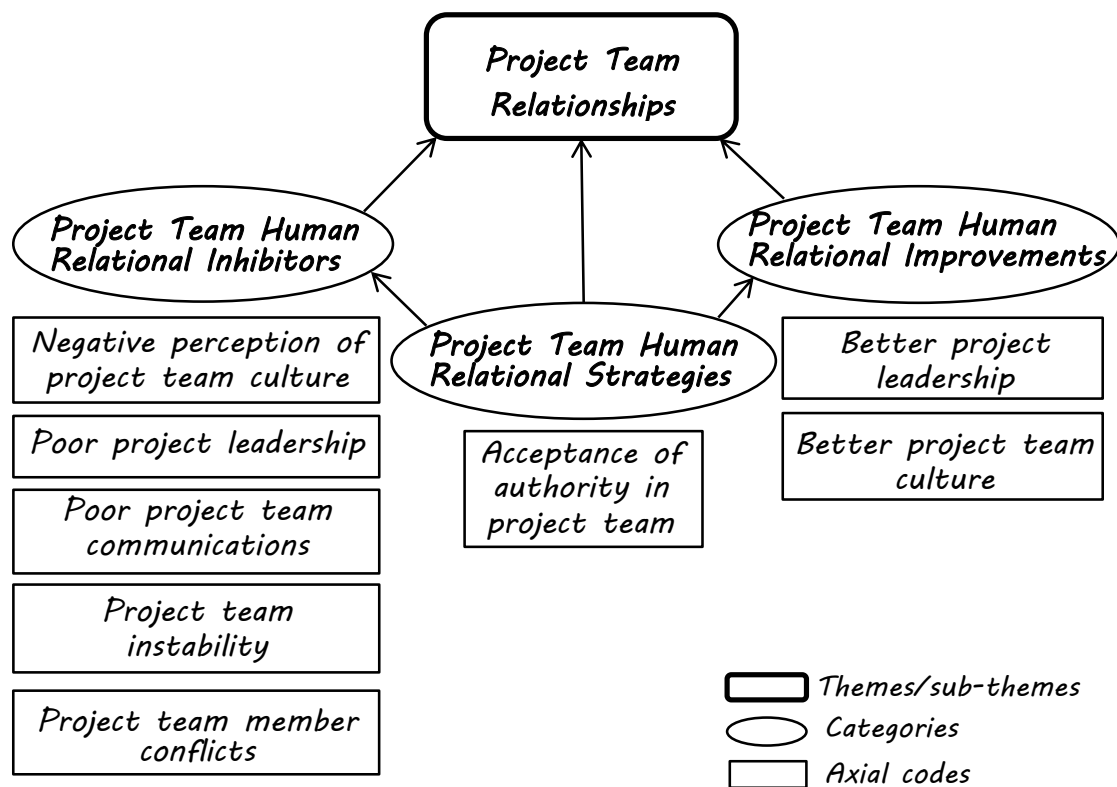


Figure 4.2 Relationship of identified categories to sub-theme 'Project Team Relationships'

Category 1: *Project Team Human Relational Inhibitors* relates to the human relational issues within the project team that slowed down the progress of the SS implementation project. Category 2: *Project Team Human Relational Improvements* relates to the human relational improvements within the project team which led to the

SS project progress. Category 3: *Project Team Human Relational Strategies* relates specifically to the strategies used for managing the human relational issues in the project team. The above diagram will be used throughout this section as a basis for discussing the contribution of the categories and the relevant codes to the sub-theme.

4.3.1. Category 1: Project Team Human Relational Inhibitors

To fully understand the sub-theme *Project Team Relationships*, those issues which contribute to the development of such a sub-theme must be examined. *Project Team Human Relational Inhibitors* is a category identified from the multiple stages of analysis. This category is important, as evidence suggests that the intra-project team human relations in the SS project studied had impacts on the project progress. Before getting to the discussion of this category, Table 4.1 below illustrates evidence of the analytical development of this category. This table provides examples of open codes from which evidence of the category was obtained.

Examples of Open Codes	Axial Codes	Category
Lack of project leader support, lack of project leader engagement, negative perception of project leader style, project leader ignorance of issues	Ineffective project leadership	Project Team Human Relational Inhibitors
Project leader ineffective communication, ineffective communication between areas in the project	Ineffective project team communications	
Project staff frustration, unhappy project team, bullying culture in project team, project staff disillusionment, unpleasant project environment, political culture of project team, blame culture in the project	Negative perception of project team culture	
High project staff turnover, frequent project team restructure, frequent changes in project team leadership, reporting line changes	Project team instability	

Tensions within project team, conflicts between 'old' and 'new' BAs, project leader conflict, project staff resistance to leaders, developers perceived coercion from BA lead, ex-business project staff undervalued by project leaders	Project team member conflicts	
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Table 4.1 Analytical development of category 'Project Team Human Relational Inhibitors'

The following sub sections describe in detail each of the project team human relational factors that inhibited the SS project. This is done by first giving a description of the factor and how it affected the project, and then by providing extractions of relevant quotations from the participant interviews.

4.3.1.1. Ineffective Project Leadership

One of the project team human relational inhibitors that emerged was the participants' negative comments on project leadership regarding how project leaders handled human relational issues in the project team. These negative views and comments indicate leadership issues including lack of engagement and support, aggressive management style, and even over-participation. These human relational issues between the project leaders and their project staff slowed down the project.

When the project team was initially assembled, it was a small team seconded from the university business areas. The early project was in the directorship of the 'de facto' leaders who came from senior administrative positions in the university and supposedly had been influential among the university staff members. Interestingly however, and possibly due to the lack of project management expertise (also see Section 4.5.1.2), the project was not progressing well under their leadership and some project members interpreted these seconded project leaders to be overly consultative and not firm enough with their opinions and decisions. They said:

"What I hear is they've done four reviews, and taken action on none of the actions. A classic one was [the first Project Director] when he was with this thing. He is a classic, he is a NF dreamer, Myers-Briggs personality profile type. So he wants to please people and he does. He will always be like that. He would

consult, consult and consult. But I want decisions like this. I am already at the answer 5 minutes before he's even thought of half of the questions, but I have to go the journey with him, so it's me understanding that's his style. But as a Director, he would not have known what was hitting him in and I think they shot themselves in the foot. They had the wrong idea of having a business person managing the programme" (a project leader, PL5, second interview, lines 473-481).

"During that time there was kind of I think de facto leadership from people like [the second Project Manager] and [the Assistant Project Director] to an extent, but I think without a really strong leader figure at the top, no much progress was made and it took a very long time for a new leader to be appointed" (a project IT worker, TW4, lines 117-125).

After the first Project Director stood aside, the second Project Director was appointed from outside the university. However, the project fared little better under this new Project Director. Evidence indicates that the second Project Director's and his deputy's management style was also among the factors that hindered the project. Their management style was negatively perceived and interpreted by a number of project staff:

"[The second Project Director] was disinterested, remote, didn't really matter. If you made a good point about something he could just override it anyway. You know, it's just... Remote is a pretty good word" (a Business Analyst, BA7, lines 122-124).

"From my perspective, he (the second Project Director) was disengaged about three months before he left, you could tell he didn't carry on, (laughter) he was rarely there, you know, he was come and go, and you could just tell that he wasn't... (...) [The second Project Director] didn't understand what he was in for, because knowing, as [the second Project Director] wasn't good at talking to people, like [the first Project Director] was very good at going talk to people,

finding out what was like, but [the second Project Director] didn't do that" (a Business Analyst, BA2, lines 499-501; 506-508).

"That moment, I mean, again, it was very very shocking to me, it was also shocking to [the second Project Director] and [the second Project Manager], which again I found shocking, when we had in admissions 20 days left and 1800 works to do. They were shocking that there was such a big gap. So I was shocked that they were shocked. (laughter) Why don't you know that? Why is that? (...) Well, again, I get back to that 20 days ago, 1800 days of work to fit in, people aren't stupid, you know, well, there's no way we could have made it, whatever. So that's one of the things that constantly change the directions and the poor leadership" (a project middle manager, PM3, lines 200-204; 399-401).

"From what I know, people didn't like her (the second Project Manager) management style, so they put a HR complaint so it was a bit ugly actually. She told people, demanded people to do thing, and I think she was under stress, so her reaction... I saw a couple times when she came back whenever she got put on stress, her reaction was to bite a bit, like fight back, so that could have been interpreted in a way that it wasn't very good" (a project middle manager, PM4, lines 587-592).

"You could tell when he (the second Project Director) completely disconnected from it as well, he was no longer interested, he was sitting on eBay and parcel after parcel would arrive, he was a fanatic bike rider, and every day there was a new bicycle wheel or gadget or something showing up, you could tell he tagged out of it" (a transition support staff, TO1, lines 152-155).

The above comments made by the project staff indicate that the second Project Director had a remote and hands-off management style and that directly led to considerable pressure on his deputy's shoulders. This pressure caused his deputy, the second Project Manager, to struggle and react negatively to the stress. Specifically, a number of project staff perceived the second Project Manager's approach to be disrespectful and not supportive to solve project issues. They said:

“There was only two or three of us who prepared to speak up in those stand-up meetings. Half the time [the second Project Director] wouldn’t even have the courtesy of being there, so [the second Project Manager] would be the person running them, and I don’t know if you had any involvement with [the second Project Manager], but her approach was terrible, it was in fact pretty much abusive in term of the way she was speak to staff because, and I’m being as fair as I can be here, I think she was incredibly frustrated as his deputy with [the second Project Director], she was incredibly frustrated with project, so she would be just trying ‘we just get it fixed!’, you know, ‘just! Get on to it!’, but you can’t get on to it because you [the second Project Manager] or you [the second Project Director] or someone above you need to resolve this, so that were pushed back to say ‘you need to get it fixed’ and we didn’t have the ability and authority to get things fixed” (a Business Analyst, BA1, lines 407-415).

“[The second Project Manager] made her (a project worker) life very difficult in those, and she no longer works for the university. She resigned. So basically in her experience, she was shot down, like she would go to meetings and suggest things, and would be shot down publicly in front of people, so she ended up getting to a point where she didn’t, she would sit in the meeting passively and not contribute, because she was not willing to put herself back there anymore, which I think that you need strong leaders, but you also need leaders who encourage and support their staff” (a business administrative manager, BS3, lines 167-175).

“If somebody said ‘I’m struggling with this’ or ‘I have problem with that’, what I observe were, [the second Project Manager] as well, and [the second Project Director], ‘that doesn’t matter, that’s the deadline, make it happen’, so eventually you don’t bring up the issues you’ve got, because you know the answer would be ‘make it happen’. (...) So you have a tune in the project which becomes, firstly, it’s not tolerated to raise an issue again and again when ‘it’s your job to fix it’, so I say when a business analyst that needs to go to the business so they are making themselves so unavailable, the responsibilities, or

‘try harder’, ‘but I can’t try harder because I am not at a level where I can give this a change’” (an IT Division manager, TM2, lines 133-136; 154-158).

“When there were obvious issues, he (the second Project Director) didn’t sort of say ‘okay, let’s get in and fix this’. And it seemed to be a pattern as well. We were always constantly told ‘Raise issues. Tell us now if there is a problem. Tell us if there is a problem’, so you raised an issue, and they either would say ‘well, fix it’ which was completely useless because obviously you have a problem because you couldn’t fix it, or you say ‘Has it gone to another level? Has it been raised it to senior management? They have to make a decision on this.’ And things seemed to go up but they never seemed to come back. So a lot of things were waiting for long time without an answer or a response” (a Business Analyst, BA7, lines 133-140).

After the second Project Director and later the second Project Manager resigned, the third Project Director who was an experienced project manager was recruited from outside the university. She was viewed as a strong leader who did move the project in the right direction. However, her ‘strong’ leadership style was perceived negatively by some project staff who had been frustrated and disillusioned with the project status.

“[The third Project Director] needs to acknowledge that that project has been run for long time, some of people that have been on the project for two or three years and they are at a burnout point because it has been so dysfunctional and you’ve got to be extra cautious I believe how you treat staff, because it’s so much the project has been so much problems for so long, you can’t do anything that’s going to, because people are so demoralised, frustrated, all of those things that project needs to be very very careful about how approaches staff, the staff activities” (a Business Analyst, BA1, lines 842-847).

“She (the third Project Director) is feeling frustrated, because she thinks, she used to say to me with words like ‘there is no energy in the team, I’m not seeing any energy in the team that I need’ but that’s her walking through the office occasionally then walking out, that’s what she’s assessing on, or seeing people

talking in the hallway or she said to me 'that person won't last...' I knew this was coming because she's been saying things about the BAs so I knew she had a radar on them, so they're under the microscope, so one of them, she said they had breakfast every morning down in the kitchen but that girl gets here at 8 o'clock in the morning and works till 5:30 at night so I would be fine with her having half-an-hour breakfast break in a day, that's fairly reasonable (laughter), but [the third Project Director] is not seeing that, she is not seeing the human side of what I'm seeing which is a team of people who need to be buffered from any kind of power plays that might go on. (...) I mean I'm like between all of us, I'm not particularly happy here working here under this leadership, I can see [the third Project Director] knows project methodology, knows what to do, but she neglects the human element of what she is doing, and I see a lot of cowardice in her behaviour, so she won't confront people who are not performing, she would just shift them and make it difficult for them and force them out. I mean she probably is right on her judgement of these people's work, but it's the management of it that I don't like" (a project middle manager, PM4, lines 335-345; 377-382).

It is interesting to see leadership and management style being too consultative and being too authoritarian both turned out to have problems. The above quotes, taken directly from interview transcripts, have provided evidence of the leadership issues within the project team that inhibited the SS project.

4.3.1.2. Ineffective Project Team Communications

Communication issues within the project team emerged and have been coded as a second project team human relational inhibitor. The statements made by the SS project team members below provide evidence of how they interpreted project team communication issues:

"Some of the other major issues around the whole process which could have helped things was the communication. There was a lot going around in circles, like you have meetings, like stand-up meetings, and you talk about things but no

one was recording anything. So an issue would be raised, and they said 'go and fix it'. And you know 'no, you have to take that to [senior management group] or Council and ask them about this', oh no, you know, nothing happened. And then, three months later, the same thing came up and 'well, where is that', and it's exactly the same place, because they still hadn't taken it anywhere" (a Business Analyst, BA7, lines 422-428).

"There was quite a gap between [the second Project Director's] views of the project and my understanding and [the second Project Manager's] understanding of what's actually happening on the ground. So there was very little transparency in certain areas of the [SS] project team. It was very difficult to unpack where things were at, 'why this was the case', so very little feasibility. What was reported was essentially things were on track and happened whereas it was coming more and more clear that it wasn't the case" (an IT Division manager, TM2, lines 89-94).

"There is also, on this project, not everyone knows what other people do, which is kind of a bit strange, but then I also heard, off the side that some people said 'I have no idea what the person did', someone being for a while and then left, and it's like 'I've got no idea what that person did'" (a Business Analyst, BA3, lines 191-194).

"There were streams of activity, all these streams never met. You know, 'this is my stream and here is the boundary of my stream, the question you're talking about could be, it's sort of by the edge there, therefore it must be yours, it's not mine.' So all these things were sort of fell into a black hole because they could be owned by two streams. That's where you need less division between the streams, where a stream approach might be okay to get the wheels turning but it's not the way you head towards, you know, it's a big big project and there's an awful lot of communication needed between, and there was a lot missing" (a project middle manager, PM8, lines 462-470).

These statements imply that the communication issues in the SS project team occurred not only between project managers and project workers, but also between project staff groups at the same hierarchical level. Ineffective communications were most salient between these project staff psychological groups. In particular, people in the SS project team tended to see two psychological groups: the business oriented people consisting mainly of Business Analysts and technically oriented people consisting mainly of System Developers and Testers. These groups consisted of persons with similar worldviews concerning the work of the project including views on the right way to do things and views on the way problems should be approached and dealt with. Although the relationships between the groups were not necessarily antagonistic, the intergroup communicative activities tended to be affected negatively by different worldviews between the groups. A Project Director described the two project staff psychological groups as follows:

“Within the rest of the team members, there is a number of, it’s not formal, it’s more informal, and it’s all about the skill sets they have, so the business analysts can kind of be drawn together, either for ‘I’ve got this problem I don’t know how to deal with it, do you know how to, (with) one of those have you got an example you could give me’ or just it’s a bit of a natural ‘you are at my level, so I talk to you’ that pecking order stuff as well, so there is business analysts. There is (a group of) developers. This is really, you would love this: the group in that room in there, 115, we now allocate that to these testing people in there, and there is a developer in there, and I mean these are your real propeller head, techo kind of things, and they almost look alike, you never hear from them, they are all males, you know, some of them are a bit of that, you know, 1980s long hair in a ponytail, they are centric in their clothing, one with a binni hat, he isn’t even bold head, you know, so they are just a little bit different, but you know they are developers. I’ve never seen them talk with anyone else other than their own group. When we sometimes have social functions, you know, on the Friday a sausage sizzle or something like that, they will be, it’s almost automatic, they will go into their huddle” (a project leader, PL5, second interview, lines 126-140).

This finding was further substantiated in subsequent interviews by the statements made by the Business Analysts such as:

“I really didn’t have anything to do with them (the IT focused team), they were sort of there, and I sort of knew they were, but we didn’t have a lot of interaction to really feel they were part of what we’re doing but I didn’t feel, I never had to go and ask them anything because that was not what I was doing” (a Business Analyst, BA2, lines 634-637).

“Sometimes I interact with them (the IT focused team) because I have to explain something, or I go in there and they’re doing something, then ‘okay, well, we email communicate with each other’, but not really... The testing and training teams are very separate from the rest of us, because the training team has had three managers or so in last six months, so it’s been difficult for them to try and connect, or have a bit of leadership and connect with the rest of the team” (a project middle manager (BAs’ lead), PM4, lines 479-483).

A manager of a technical team and a System Developer further reflected on the difficult communications and the difference in worldviews between the two groups, suggesting that:

“There has been time, going back over the history of this, there was a period where I was instructed or I was banned from speaking to a BA, because the BAs were far too busy. The BAs’ supervisor, the Head of BAs told me I could not have any contact with BAs, all BAs, the BA team. I was not to bother them. I was not to have any contact with the BAs. (...) That was just one instance, but that one still raises my hackles, as how am I supposed to do my job, how the BAs are going to do their job if they don’t know what issues there are in data conversion, and how can I do my job if I don’t know how they think they are going to solve this problem” (a project middle manager, PM8, lines 310-316; 339-342).

“Within the group I’m in, the integration group, we generally think the same way. We don’t have a great deal of trouble arguing about things. We see things

generally the same way. But as soon as we start talking to other groups, particularly some of the business analysts, they don't necessarily understand or see things in the same way" (a project IT worker, TW3, lines 220-223).

The above discussion is interesting as it indicates that despite the fact that the Business Analysts group and the IT technical group were both in the project team sharing the same goal to achieve, there is a lack of collaboration or effective communication when they tended to emphasise their group identity and their difference from the other group.

4.3.1.3. Negative Perception of Project Team Culture

Another project team human relational inhibitor that emerged was the project team cultural issues identified by the participants. The negative perception of the project team culture, given the lack of project progress, led to frustration and disillusionment of the project staff, which in turn inhibited the project. The statements below are some project team members' general description of their negative perception of the project culture and environment:

"I know a lot of what the stressful problems with the project were, so I would imagine that would be the same prior to me arriving. In my understanding of the project it hasn't been a good project culture" (a project middle manager, PM3, lines 103-105).

"There's a lot of factors why it's unpleasant at times, and like the big ones, the politics and the success of the project. (...) I think the project is at times quite an unpleasant working environment for people, and if you don't have much resistance to jumping off and looking for something better, then it will" (an IT project worker, TW4, lines 443-444; 453-455).

"I think the project team is viewed with a mixture of suspicion and frustration" (a project leader, PL3, lines 98-99).

Specifically, some project team members further identified the ‘bullying’ aspect of the project culture:

“I think with the various examples of not so much formal complaints, but when people left with their exit interviews they either hinted at or were quite specific, and it comes in under this word that is used all the time now around ‘bullying’. The word ‘bullying’ seems to, it does mean coercion I think, and it’s quite commonly used now” (a project leader, PL1, second interview, lines 422-425).

“It has been fraught with difficulties and frustrations and animosity and personality clashes and little personal power plays, and cliques here and cliques there, and ‘I’m more important than anyone and so I get preference’ and, you know, ‘this particular team I’ve got and everything just has to stop for them and the rest of you are just minions and idjits, sort of just pick up the crumbs at the end’” (a project middle manager, PM8, lines 453-456).

“There have been a number of management staff that are really good at their area of expertise, their field of knowledge, and they’re given managerial and staffing responsibilities and they don’t have those skills, nor the personality to actually deal with people. I know I’ve observed bullying. I’ve observed really horrible..., you know” (a transition support staff, TO5, lines 219-223).

The above statements indicate that the political and coercive power conflicts were the important sources of project team members’ negative emotions, which included frustration, suspicion and disillusionment. With the lack of project progress, these negative emotions further undermined the project as a large number of project team members at different hierarchical levels left or wanted to leave. They said:

“I was at drinks last Friday night with many, most of the people there were from the project, they are not a happy bunch of campers. (...) I know some people are looking for other jobs because they feel that their opinions aren’t sought, so they’re not viewed as being someone in the project that wants to support and

have a move, you know, a leadership role in the project, so how should I stay here” (a Business Analyst, BA1, lines 488-489; 713-715).

“Very much disillusioned, and in that mentality of ‘well my contract is coming up and I don’t want to be here anyway’, so those two things have influenced people. Just before I came, there were about seven people who opted to not renew their contract or to terminate their contract because they couldn’t see that this was ever going to work” (a project leader, PL5, lines 575-578).

“I think there has been some discontent probably more from those who have initiative and want to contribute, want to be seen doing something productive, but the project has gone through an extant period of almost hiatus where there wasn’t position to deliver because of the circumstances, so frustration probably emerges from that. There have been several people who have left since I joined somehow out of that frustration” (a project middle manager, PM2, lines 171-175).

“There was an exodus around there after [the second Project Manager] left. [The second Project Director] left and [the second Project Manager] left, [a BA] left, there was suddenly a big sort of spin of people, and I think you have people just went ‘nope’, they could see the boat was either going to stall or turn around, and I think you have to make that decision, ‘am I going to push it through or shall I go and do something else’” (a transition support staff, TO1, lines 266-269).

Interestingly, it was noted by a senior administrative manager in the university that the project had a ‘blame’ culture due to the long length and the lack of progress. This perception of the project culture implied the lack of diagnosing the real problems that were plaguing the project other than politically replacing the people that were involved. As this administrative manager said,

“I think that an unfortunate consequence of the story of [SS] insofar as it’s been going on since 2006, and therefore it has a blame culture, you know, it is

unsuccessful because of this, this, this, this and this, you know, something a bit more forward focused as opposed to retrospective. (...) I am concerned that the project has got a history of blame, pointing fingers, scapegoats, fall guys, all that kind of thing, and you saw that with [the first Project Director], you saw that with [the second Project Director], you saw that with [the Assistant Project Director], you saw that with [the second Project Manager], and probably to lesser degrees, other people along the track” (a business administrative manager, BS3, lines 156-159; 467-470).

The above quotes, taken directly from interview transcripts, have provided evidence of the project team culture that was negatively perceived by the participants and was identified by them as a critical inhibitor of the project. The negatively perceived project team culture provides a picture of the environment in which the human relations and power interplays occurred.

4.3.1.4. Project Team Instability

Another project team human relational issue inhibiting the project was the instability in the project team, which included issues such as high project staff turnover, frequent project team restructure, frequent changes in project team leadership and reporting lines. The following quotes underlined the issue of high project staff turnover:

“I suppose it begins the journey reflecting a turnover in key people and positions, as this baby has crawled on through a long gestation period” (a project middle manager, PM1, lines 45-46).

“I’d already heard about [SS] before I worked in [SS]. I was working in [IT Division] and I heard about [SS]. I didn’t really know what exactly they were doing but I heard it was a bit of a basket case that would be the word most people use. (laughter) So it already had a reputation as being a bit of a place where many good people go and leave quite quickly” (a training team member, TT2, lines 11-14).

“There has been so much waste I think. What was changed was personnel all the time, and obviously I’m the longest person in the project and I’ve seen all the people come and go (laughter)” (a project IT worker, TW1, lines 108-110).

“There’s been a lot of people leave the project at the timing, you know, [a Project Manager] left, that was unfortunate, we could have done with her right up to go-live, but she went off to do other things. [Another Project Manager] left, he was the implementation guru, he was figuring out the timelines and implementation plans. He came and he went, four weeks he was here and gone” (a transition support staff, TO3, lines 283-288).

A senior business stakeholder also commented on the instability:

“We’re still not quite confident because we were granted a new business analyst who I think left the university after a week so I didn’t even have a chance to have a conversation with them, and then a new person has arrived but that person has got other things to do. (...) It’s the instability, the fact that people are leaving and coming into the project. There is a fair level of transience as far as I understand” (a senior management member, SM2, lines 179-181; 383-384).

Importantly, the data revealed that the high turnover of project staff was driven from project staff relational issues and frustration. Two project managers who left the project said:

“I’m thinking one person particularly who was a project manager who moved on, I think he left more out of frustration, he’d been through this cycle of a couple of times and I think he was just tired of it, (laughter) planning, how you are going forward the goal, and then it dies whatever, and then the next guy came in, whole lot of planning again, and then [the third Project Director] came on board, all the whole of the planning again, so I think there was just frustration associated with that, and the fear might happen again and again” (a project middle manager, PM2, lines 181-189)”.

“The whole, the way the structure change in the project, it was a form of bullying. (...) I was told to report to [a different Project Manager], and a month and half later, nothing was done and I just went ‘no, I’m done. I’m leaving.’ I’m not the only one who was leaving too, so two members were leaving at that time. The whole middle management level vanished as well. It was a very frustrating period and we just couldn’t keep up with it” (a project middle manager, PM6, lines 65-68).

As indicated in the above statements, the project team restructure was the major cause of the frustration. The issue of project team restructure was further substantiated in subsequent interviews by statements such as:

“We restructured the project structure. I mean, I can give it to you a flick book, we changed everything” (a project leader, PL2, lines 230-231).

“It’s been very unstable environment in terms of the structure and staff who’ve been here” (a project IT worker, TW4, lines 438-439).

“I said to [the third Project Director], ‘we don’t want to make any more changes to the structure of this team’, it’s just too destructive. (...) It has been so stressful because of all the changes in leadership, but in the last, we only have two weeks since [a team leader] and [another team leader] left, and so I don’t want anything to change now in the next six months, so we can just stay where we are, just keep going, so everyone doesn’t have to think about all the ‘oh this is going to be the person in charge next week’” (a project middle manager, PM4, lines 316-318; 525-528).

“I think the biggest problem was and still is reporting lines change. These people that I deal with, they’re doing something one minute and then you go back to them and then they would say ‘I am no longer doing that, I’m now data provisioning’. It’s almost like robing Paul to pay Peter scenario. (...) So the authority that has been actually a problem in a sense you don’t know who is in charge and, ‘is this task in your portfolio’ things get bandied around, and some

people seem to end up with a lot of responsibility and others sort of push it away. That for me is a big issue of where, of knowing who is in control” (a transition support staff, TO1, lines 409-412; 426-430).

The above quotes clearly indicate that the restructure of the project team led to reporting line changes, which was emphasised by the participants to be destructive to the project. A consequence of this instability was the loss of knowledge within the project team, as stated by a number of project staff:

“One of the key things that happened is there have been so much changes and key people have left and people that knew what was happening. I think that’s put the project behind and it also means that they’ve lost key intelligence about how things hang together” (a transition support staff, TO2, lines 48-50).

“Also when I started too, the admissions team had a huge turnover of BAs, a huge turnover, so the knowledge is lost, every time you lose somebody” (a Business Analyst, BA8, lines 219-220).

“Most people who were working when I started have left now, and they talked about high turnover as well, so obviously there was a lot of turnover before since I came in and still going on. I’m not sure power comes into it but I think it’s more just every time new person starts and they have to relearn all the sort of specifics of the job, the specifics of the system, and they leave, and a new person comes in and has to spend all that time learning it again, and often people forget why a decision’s made or the fine details aren’t there” (a Business Analyst, BA5, lines 13-19).

Another consequence of the project team instability, which further exacerbated the issue, was the lack of human resources for the project work. Therefore, project staff had to be moved around to take roles in other teams within the project, in particular, Business Analysts being moved to be System Testers. A transition support staff explained the reason why it was difficult for new recruitment:

“People leaving has been an issue because the time that it takes to employ new staff and interview all that staff, and when the project is this close to going live, you just can’t. So that means that timelines have been really squashed up, we’ve been under more pressure and that’s why people had to step into roles and things that they wouldn’t normally do – training, coordinating, things that they wouldn’t normally do” (a transition support staff, TO3, lines 303-308).

Project staff having to be moved to other roles was perceived to be a bad decision. The project staff believed this instability of moving around staff between different roles caused the loss of knowledge and contact in their original role, suggesting that:

“We’ve all got the impression that the business analysts would be moving around. My understanding was that the business analyst would still be a business analyst, and everyone in all the other areas would just be able to go to them for the information, but no, they have uprooted them, they’re no longer a business analyst, and they’re a tester, so now they’re actually testing the system and not supporting all the other areas, because they need that information. They’re actually operating as a tester, so because they’ve got a full load as being a tester, they can’t actually support the other areas” (TO5, lines 189-196).

“We’ve got business analysts that kind of being moved off into testing, we’ve got some knowledge in the project, but the people in the project don’t necessarily know what the current process is and how the new process change is that” (PM7, lines 696-699).

Moreover, this instability of moving around project staff led to a lack of expertise and experience in the new role, as suggested by a career System Tester:

“Same issue for testing, now they have, all the BAs have finished all their BA role, they moved them into testing but they’re not experienced testers, so they are not really testers. I think now in the testing team, there are only three experienced testers. The rest are all ex BAs or subject matter experts. (...) They can help in a way but you still need someone with experience, like experienced

testers that we do need. What they've having now is, they have an ex BA to lead the testing..." (a project IT worker, TW5, lines 63-67; 70-71).

4.3.1.5. Project Team Member Conflicts

Within one interview, a Project Manager noted various tensions that occurred in the SS project:

"There were a lot of tensions between members of the team, members of the business, members of support teams" (PL4, lines 42-43).

This statement brings to light the fact that one of the major critical factors constraining the project was human relational conflicts. Various conflicts between project team members emerged and have been coded as one of the project team human relational inhibitors. Episodes of the most significant project team member conflicts unfolded through time. Next, these episodes will be analysed in turn by giving the details of the context within which they were enacted.

Episode 1: Project team conflicts involving coercion and covert resistance – the ex-business Business Analysts (BAs), the second Project Director, the second Project Manager, and their external recruits

This episode involves the project team conflicts between two sub-groups of BAs and between ex-business BAs and project leaders, and covert resistance to the project leaders by the ex-business BAs.

As identified previously, the initial project team was a small team seconded from the university business areas; thus most project team members at the time were university-sourced staff. It was noted that there seemed to be evident divides between the ex-business staff and externally recruited project specialists, as suggested by two project managers:

"There were, in some ways, quite evident divides between university-sourced staff on the project and contractors. That's normal for a project like this, but this

one seemed to be a bit more hostile” (a project middle manager, PM8, lines 23-25).

“Within my team, I can see that I’ve got little cliques within my team, so people who have been here forever, you know, the old timers, and the new ones tend to stay together, and there is only a couple of people that have managed to bridge the gap. When we had the admissions and the [Student System] project, that admissions team stuck together and made decisions without even regarding anyone else in this team even though it was team of five. They were just so cliquy that you couldn’t break into it, and [their team leader] encouraged that to be ‘we are special, we are this...’ that sort of thing” (a project middle manager, PM4, lines 468-474).

In particular, these psychological divides were most significant in the BAs team. The BAs at the early project stage were ex-business administrators. They were titled as BAs but were not career business analysts. When the second Project Director came on board, with the realisation of requiring external project specialists, a number of professional BAs were recruited. Then, two salient psychological groups within the BA team started to form between the ‘old’ BAs and the ‘new’ BAs. A project manager of a technical team described the hostile sentiments within the BAs team:

“The BAs weren’t about to have anything, you know the university-sourced BAs who, I’m not disparaging them, they weren’t BAs. They weren’t business analysts. They had no experience in the business analyst role. They’re subject matter experts. And I feel sorry for them, for those that realised that they were in a different world. I feel sorry for them because they weren’t getting any assistance. They weren’t getting any pointers or direction. The real BAs were fighting to try to get a grip on what the university did. There was not a real cooperation. And there was resentment on both sides. So the subject matter experts, some took the view that the professional BAs weren’t required because that, you know, and ‘we’re not going to help them because they’re getting paid more than us’. There was sort of this resentment that they were brought in and they’re trying to lord it over us and tell us how to do our job. And the

professional BAs are trying to find out how things work and they're not getting any assistance. So that was resentment. They're not going to help, 'okay, the university people know all this to know about it, they don't need our help, they don't want our help, they won't help us, and we won't help them'. So it wasn't really blatant, out there in your face attitude. Sometimes it's more subtle than others. Sometimes it's, oh, right-o. (Laughter) Some people were more open with the hostility" (a project middle manager, PM8, lines 30-46).

The discrimination between the 'old' and 'new' BAs occurred. The 'new' BAs felt they were isolated from key discussions by the 'old' BAs. A 'new' BA said,

"I did admission and I had a lot of problems, because at that time, we had three people in that job, [an 'old' BA], [another 'old' BA] and I, they'd always been doing it for a long time and I just came and it was my first time here. (...) And actually [the two 'old' BAs], they were not business analysts. They were working as university staff. And the problem was, because they were thinking that they'd already been doing it for so long, they didn't (involve me), like when we went into a workshop, if I had a question, they didn't allow me to ask. (...) And they're not business analysts, neither of them, but for me, I'm different, because I've already worked as a business analyst for a long time now, like four, six years. So I would be looking differently from what they're looking. They were more looking at how they used the system as a user, like user acceptance, but I would be looking at the function and how it meets the business, so we were looking differently. So they were saying 'you're not able to...' so I was thinking 'oh, I need to change the job', (laughter) because I don't want to work in that I was just doing the records. So what they only wanted me to do is, first, they didn't want me to talk with the business; second, they wanted me to just record the business meeting notes. Then I read the lists, they wanted me to do the testing for it to see if they worked. But that's not really the job my title is" (a business analyst, BA6, lines 63-65; 93-96; 100-109).

On the other side, the old BAs who believed they had the knowledge of the business and the university culture felt undervalued by the second Project Director, the second Project Manager, and their external recruits. Some 'old' BAs said:

"I would say that the people from the business were very undervalued compared to business analysts from, external business analysts. I felt like we had a lot of knowledge because we already knew what things needed to do. There was no value really on that, it was... And I was told several times that 'oh well, this person comes from the outside and they're just adding so much value to the project and they are doing wonderful things', and that was good, they had a high, you know, they valued those people. But I think they really undervalued people from the business who actually had, did know how processes were meant to work and understood more the philosophy of the university" (a Business Analyst, BA7, lines 51-59).

"Everything that those of us who came from the business or understood the business kept trying to say, he (the second Project Director) didn't want to hear, he wanted the 'real BAs', because in his perception I wasn't a real BA, because I came from the business, I hadn't been trained in PRINCE2 or any of the other things, but I worked in the systems team, I understood the systems, I understood the business, and I'm pretty cluey, I could work things out. I had not done PRINCE2, so this guy falls in, you know, a real BA. I was told I was not a real BA. He wanted his external people he had appointed, were the people he was listening to, who were the real project managers, the real BAs. (...) Well, it was dismissive that people like myself trying to, I mean that, we wanted the best outcome of the project, but it was almost like every time, any of us that came from the business who were in that group previous to [the second Project Director] coming on, it was almost as soon as any of us would speak up or say anything, it was dismissive, 'what would you know, you haven't worked in a real project, you're not real BA, you're not real anything, we are not interested in what you've got to say', and not understanding or acknowledging that we came from the business, we understood the business, and from that we were actually

speaking with a level of knowledge and authority in terms of the university, the wide university” (a Business Analyst, BA1, lines 323-333; 496-502).

“When I started, it was very much distinction between people who had come from the business and those that hadn’t. We knew business, we understood what the business didn’t have, what the current systems were, and then we had a list of people coming in who didn’t know that, so there was awkwardness, because most of them worked on this kind of projects before whereas we worked within the university structure, and we knew that you could do it that way but reality is they would do it this way, but because that is how the business operates so at the time it was quite difficult” (a Business Analyst, BA2, lines 595-602).

As a consequence, often when the ‘old’ BAs raised an issue, those externally recruited project leaders (e.g. the second Project Director, the second Project Manager) chose to ignore it. One particular issue was around extending the project scope for integrating a sub-system. The ‘old’ BAs believed it was necessary to integrate the sub-system with the main student system that was implemented in order to maintain the business process. An ‘old’ BA said:

“Without them working together they would fail because you don’t have admissions you don’t have students, if you can’t get them from that (sub-) system to [the main student system]” (a Business Analyst, BA1, lines 458-459).

The ‘old’ BAs then raised that issue in a project meeting but they did not feel supported by the project leaders, as described by an ‘old’ BA:

“I raised it at the stand-up (meeting) and I was pushed back to say ‘just take it back to the working group (of business stakeholders) for the working group to make the decision’, but it was like the working groups can’t make the decision because it’s about resourcing. The [senior management] has to make decision about resourcing and I could not get [the second Project Director] and [the second Project Manager] to acknowledge this was something that had to go up,

so I raised it in front of thirty odd people and I was pretty much verbally attacked by [the second Project Manager] in terms of it was for me to take it back to the working group until the working group to resolve it. The working group could not, would not ever be able to resolve a resourcing issue” (a Business Analyst, BA1, lines 471-477).

As a result, the ‘old’ BAs conducted covert resistance as they believed they were right in this matter. They did not follow the second Project Manager’s instruction of going back to the working group which they believed was not worth doing, evidenced by the statements made by some ‘old’ BAs:

“(When being asked what they did after being told to go away and ‘fix it’,) no, I didn’t, there was no point, didn’t get anything from the business. So really it was more about ‘what could we do to do things like learn [the sub-system]’. So we went to a phase of trailing things on [the sub-system], and ‘what could we do in it’, ‘what were the holes’, ‘what do we need to...’, so we kind of went internal into the project, ‘what can we do’. (...) Because I had tried, and I wasn’t going to keep trying to, I’m going to get the same answer every time, so I’m not keeping doing it. I wasn’t prepared to just keep knocking my head on a brick wall, just for the sake of being told to keep going back to the business while the business didn’t have the time and capacity” (a Business Analyst, BA1, lines 530-533; 543-546).

“This is really what we were doing with. We were ourselves saying, okay, we need to understand the system, so we learn as much as we can about it, you know, see what solutions we can find” (a Business Analyst, BA7, lines 195-197).

The consequence of these triangular conflicts was that the ‘new’ BAs could not get to do the real ‘fieldwork’ for the business requirement analysis, and the project issues raised by the ‘old’ BAs were not paid enough attention by the project leaders and therefore remained unsolved. These triangular power conflicts within the project team then largely limited the project progress.

Episode 2: Project team conflicts involving coercion – the Assistant Project Director, the second Project Director, and the second Project Manager

Another salient conflict that occurred within the SS project team was the political removal of the Assistance Project Director. As described by the Assistant Project Director himself, there were politics between him and other project leaders when he was in the project team:

“I think the real issue with the whole project team was who had the authority. And if anything, that was the tension between myself, [the second Project Manager] and [the second Project Director], was who had the authority, in terms of informal authority” (project leader PL2, lines 662-663).

The Assistant Project Director was a business senior administrative manager in AsiaPac University before he was seconded for the position of a SS project leader. As the conflict between ex-business project staff and externally recruited project staff grew, the tension between the ex-business Assistant Project Director and the externally resourced second Project Director and his deputy led to the Assistant Project Director being removed from the SS project. A large number of SS project staff, mostly the ex-business project staff, interpreted that the Assistant Project Director was one of the few project leader who was willing to support them on project matters and his removal was a politically coercive act:

“In the middle of 2012, they removed [the Assistant Project Director] from the project, and they did it in one of the most disgusting ways I’ve ever seen, they told him at 11 o’clock and then they told us at 12 o’clock and in front of everybody and he having to stand there in front of the entire project while he was telling everybody that he is leaving, he’s been going off to other things. (...) He (the Assistant Project Director) is effectively kicked out of the project and in part blamed, was seemed to be blamed for the project outcomes, but he was the point of sanity, he was the only person in that leadership team who we could go to and say ‘look we’ve got this headache’ and he would try and result things for us, but [the second Project Director] didn’t like that because it undermined his

power, [the second Project Director] wouldn't do anything to fix anything. [The Assistant Project Director] was trying to assist, trying to do what he could, used his contacts in business, trying to get things moving" (an (ex-business) Business Analyst, BA1, lines 634-638; 661-666).

"I think I am hard-pressed with what I know to be able to pin point to a specific example of that sort of coercion, I think one that would have got close to it would have been the removal of [the Assistant Project Director] from the project, where clearly that wasn't what [the Assistant Project Director] felt was the best thing, and that decision was taken and he was informed that he was no longer part of that project in a very off-hand sort of way. (...) I think you could argue that he was coerced in that project. (...) I think he was quite upset about the decision and didn't really understand why, but he is a person who engenders quite strong loyalty from staff to work and so on, and they would have felt the particular decision to be incomprehensible and unjustified" (an (ex-business) project leader, PL1, second interview, lines 428-433; 438-439; 452-455).

"At one stage [the Assistant Project Director] was very heavily involved, and at one stage they just took him off it. It was pretty terrible. We had a meeting one day, [the second Project Manager] just stood up and said '[the Assistant Project Director] is off the project'. They just got rid of him" (an (ex-University IT Division) project IT worker, TW1, lines 124-126).

"I'm sure you've heard comments about [the Assistant Project Director] and everything that happened there were absolutely disgusting in my opinion, absolutely disgraceful. [The Assistant Project Director] was the person who knew the most, was the most helpful, could put the most dots together, and he would always have time for you to explain and he never made you feel silly. And I tell you what, he was literally told an hour before a meeting that we were all out and he was leaving the project, and we were all told an hour later, it's like, I'd say that's disgusting, that's really really poor. (...) [The Assistant Project Director], you know, he is not going to like it any more than anybody else that something is not going well or whatever, but he would tell the truth. I'm sure.

(Laughter) So I think that was really appalling situation. I think that was absolute abuse of power” (an (ex-business) Business Analyst, BA7, lines 305-311; 334-336).

“[The Assistant Project Director] was unfortunately very ungraciously removed from the project, very ungraciously, very. I was in the meeting with him, and he’s got an email, he wasn’t told, nobody came and spoke to him. He is in a meeting and he gets an email, very very poor. And that was done by [the second Project Manager], as far as I know. I don’t know, but [the second Project Manager] would have been pushing for it, because [the second Project Manager] was out for ultimate power” (an (externally recruited) project middle manager, PM8, lines 181-185).

It was suggested by the Assistant Project Director that the reason behind this power struggle was that he knew too much detail of the project process and this might reduce the power of the other two project leaders. The Assistant Project Director said:

“Well, I think it’s because I had too much of the detail and people on Steering Committee like to dive into the detail sometimes, and it might show that [the second Project Director] was lacking the detail. (...) To me it was the strangest after I had the meeting to say that ‘you’re off the project’. It was the strangest thing just sitting there afterwards going ‘what an odd thing to do’. Why wouldn’t you say ‘you’re going to be in an advisory roll now, we are bringing all new people and you are going to be transferring your knowledge to those people’? It was like ‘no, you’re gone’. (...) I think in me knowing was me having the knowledge that I had was probably the biggest, that’s the reason why I’m not still there” (project leader PL2, lines 282-283; 599-602; 674-675).

Power struggles occurred not only between the Assistant Project Director and the second Project Director and Manager together, but also between the second Project Director and the other two project leaders including the Assistant Project Director and the second Project Manager. A project manager described these triangular power interplays:

“[The second Project Director] was up there as the Director and [the second Project Director] was squashed between [the Assistant Project Director] and [the second Project Manager]. He was the Project Director, but he’s got no support from either of those, and they were warring amongst themselves, and he couldn’t get... Any direction he was trying to provide is fought and rejected by both of those. There was just this triangular power play, and [the second Project Director] just backed down, I don’t blame him. And [the Assistant Project Director’s] gone, and [the second Project Manager] is just, it’s all laid on her shoulders. She couldn’t fix problems” (a project middle manager, PM8, lines 185-190).

As a result, the SS project process was considerably impeded by these triangular power interplays within the project team. It indicates that the intra-project team politics had negative impacts on the project and needed careful consideration.

4.3.2. Category 2: Project Team Human Relational Improvements

The second category associated with the sub-theme *Project Team Relationships* relates to human relational improvements that made the project progress possible. These improvements included leadership and culture within the project team. Table 4.2 below provides a description of the specific analytical development of this category, and indicates the two axial codes that contributed to it.

Examples of Open Codes	→ Axial Codes	→ Category
Better leadership in the project, more supportive project leadership, stronger project leader, project leader better communication	Better project leadership	Project Team Human Relational Improvements
Increased project momentum, more harmony project team	Better project team culture	

Table 4.2 Analytical development of category ‘Project Team Human Relational Improvements’

4.3.2.1. Better Project Leadership

A major human relational factor in the SS project team was the improvement of project leadership. The project leadership improvement occurred mainly in the third Project Director phase. Interestingly, although the third Project Director's management style was interpreted as too authoritarian by some project staff (see Section 4.3.1.1), significant progress was made in the project under the third Project Director's leadership. The successful aspect of her leadership came from not only her professional project management expertise (see Section 4.5.2.1), but more importantly her strategies of dealing with human relational issues. This finding was instantiated by the statements made by project staff and other project stakeholders such as:

"Really there was a lot of improvement when [the third Project Director] came as far as direction, people knowing what they're doing. It was very cutthroat. It was definitely very cutthroat. But I can see a lot of merit in what she did and obviously she knew what she was doing, and it was very evident the difference between people who didn't know what they're doing and [the third Project Director] who did know what she was doing, and she was comfortable in that role, and she could do the hard things even though they're all human relation sort of things" (a Business Analyst, BA7, lines 271-276).

"I think she's (the third Project Director) been fabulous. A lot of people don't agree with her methods. Yes, she can be tough. She kicks your ass. You know, fine, you might need to be kicked quite as hard as it was. But you know, she kicks your ass, she kicks it for a reason, and it's not personal" (a project middle manager, PM8, lines 489-492).

"I see her as a very strong leader but I don't really know the background. I don't think at her level she really needs to have particularly all that much experience in IT. I think she actually does, and she knows enough to know if somebody's taking for a ride. But really it's the politics at that level. This is so much money involved. It's so long this is taking, so important to the university. What she needs to be able to do is like what we just said, stand up to the sponsors, and

she needs to be able to get them involved” (a project IT worker, TW4, lines 188-193).

“[The third Project Director] came on board. [The third Project Director] is your classic project director. I mean she is very driven, she is very factual, not a huge amount of EQ, this is really just all about the delivery of a project and get out of my way. That’s exactly what we need. (...) She is making very good progress. From what I understand, her team like working for her because she is very loyal to her team. She doesn’t tolerate fools but she certainly protects them well. They seem to be moving forward and certainly hitting the milestones” (a senior management member, SM4, lines 166-168).

“[The third Project Director’s] great strength is around project discipline, so we get very detailed summaries of progress which is very clear and evidence based, and that sort of clear the audit trail and everything else. That was lacking before. (...) The reality was it actually was a lot of progress that they’d made, and it didn’t take too much concentrated effort to get the thing back on the right track, but it needed the right individuals to drive that, and it needed the governance structures to drive that, and that’s now what I believe we’ve got in place” (a senior management member, SM3, lines 68-71; 121-124).

“[The Assistant Project Director] should have been a subject matter expert, I mean, but he wasn’t the right person, and neither was [the second Project Director] or [the second Project Manager], so [the third Project Director] was the right person” (a project IT worker, TW3, lines 177-179).

4.3.2.2. Better Project Team Culture

A second enabler of the SS project was the improvement of project team culture. Under better project leadership, the project team members started to have more confidence in the SS implementation. ‘Momentum’ was the word that was commonly used by the participants to interpret the improvement of project team culture, evidenced by the quotes below:

“There is a great deal of momentum now, changes have been unsettling but things are moving along and we have a lot more structure and rigour and discipline than we have had in the past which is really starting to pay dividends with people’s clarity about what they need to do” (a project leader, PL4, lines 88-90).

“I do think we are on the right track. We’re just seeing that shift in terms of people starting to actually think where we are, it is hard to change, that momentum is just start to shift and that’s really really good” (a business administrative manager, BS1, lines 454-456).

“You can sort of justify that you now are getting into a kind of getting the momentum going, and that sort of thing” (a project middle manager, PM4, lines 196-197).

“From what I see there is people who want to be here now whereas before it was there’s no other job to go to so I have to stay here” (a project leader, PL5, lines 461-462).

“There is now the team within the project that lead the project are much more aligned in their thinking attitude, so there is more harmony I guess, from that perspective. We were all moving together rather than there had been one person who was like ‘no, it would be like this, that would be like this’” (a project leader, PL4, lines 203-206).

The above quotes extracted directly from the interview transcripts present the actual improvements of human relations within the SS project team. These improvements influenced the project positively. The next section will discuss what human relational strategies were used to enable the improvements and make progress in the SS project.

4.3.3. Category 3: Project Team Human Relational Strategies

A form of power strategy that was effective in the SS project team emerged from the data. This power strategy was the use of authority in the project team and the

acceptance of authority appeared to benefit the project. Table 4.3 below provides a review of the analytical development of this category for reference purposes.

Examples of Open Codes	→ Axial Code	→ Category
Accepting authority of project superior	Acceptance of authority in project team	Project Team Human Relational Strategies

Table 4.3 Analytical development of category ‘Project Team Human Relational Strategies’

The following sub section will discuss in detail this project team human relational strategy by providing an analysis of some relevant episodes.

4.3.3.1. Acceptance of Authority in Project Team

The discussions in the above sections indicate that the lack of ethical power could lead to human relational conflicts and even resistance behaviours. An interesting finding discovered from the data is that the acceptance of a superior’s power, that if perceived to be within their legitimate authority, assisted the progress of the SS project. This finding will be evidenced in the following episodes.

Episode 1: Acceptance of authority – the external independent review and the first Project Director

This episode shows the perception of authority power, involving the first Project Director having to accept an external independent review. As the early project progress was slow and some problems emerged, an external independent review was conducted due to some anxieties voiced, as described in the statement below:

“A nervousness at Council around the project was responded to by saying ‘well, I think if we get some external advice on the project that would give us a particular comfort around where the project actually is’” (a project leader, PL1, second interview, lines 228-231).

When being asked about the attitude on the review, the first Project Director disagreed with the SS Project Steering Committee decision but obeyed it because he viewed the Steering Committee as legitimate authority he was willing to follow. He said,

“I thought it was not going to help the project in any sense. It was an enormous amount of work to bring consultants in cold. They hadn’t had any previous connection with the project. (...) My initial reaction was ‘this is rubbish, it’s just going to distract us and all the rest of it’. However, I don’t have an authority to actually stop this thing happening and therefore I’ve got to go along with it, and I can actually see that they’ve got a point in what they were asking for” (a project leader, PL1, second interview, lines 231-233; 315-318).

The researcher continued to question the first Project Director about this issue. The researcher asked what would have been his response if this decision had been made, not by persons senior to him in the organisational hierarchy, but by someone at his own level. He replied:

“I would have taken a much stronger argument against it certainly, yes” (a project leader, PL1, second interview, line 326).

It was inferred from the conversation that the first Project Director saw himself as belonging to the SS project staff group, and at a higher level, to the psychological group of AsiaPac university employees, and as such, he accepted the hierarchy of the project team and the organisation as legitimate and hence saw it as right that the Steering Committee could mandate an external review. He did not agree with the decision but viewed it as within the legitimate authority of the Steering Committee so that he had to obey. The external review was critical and uncovered things that needed attention (e.g. the critical problems identified in Section 4.5.1). The project status would have been worse than it was if the issues identified by the review were not known until later in the project.

Episode 2: Acceptance of authority – the testing team project manager, the third Project Director in a project management meeting

As another example of the process of authority in the SS project, consider the following observation from a project management meeting. When a testing team project manager was reporting some issues and ‘blockers’ to the third Project Director in the meeting, the third Project Director’s response was:

“No excuses to me, [the testing team project manager]. (...) Can I suggest that even that activity we don’t have to do that right now? We are talking about data conversion is a number one priority (...).”

The third Project Director provided some suggestions about what was the first priority to do for the next stage, and she continued to comment:

“Look. Now you know what the number one priority is. I’m going to give you a deadline. I want, in the week before Easter, a presentation to us covering all the different aspects. Is that okay?”

The testing team project manager hesitated for a few seconds showing signs of reluctance and then replied:

“That’s... fine...”

This observation in the meeting indicates that the testing team project manager did not willingly agree with the deadline and further did not perceive the requirement as easy to meet but accepted the authority and the legitimate power of the third Project Director. It implies that the authority hierarchy in that group was important to the project manager, and thus he had to accept the mandate assigned by the third Project Director even if he did not happily agree with the mandate of the deadline. It would have been more interesting if the researcher could confirm with the project manager about how he was feeling in that circumstance. Unfortunately, this project manager left the project before the researcher could get a chance to talk with him about that particular matter.

4.4. SUB-THEME 2 OF THEME 1: STAKEHOLDER RELATIONSHIPS

The second sub-theme of the first theme *Human Relational Factors Affecting the Project* is *Stakeholder Relationships*. This sub-theme is of particular interest to the research, as evidence suggests that the stakeholder relational issues were the major difficulties and problems in the SS implementation project, and then, the effective use of persuasion strategies aided the SS implementation. The data indicate that stakeholder relationships, especially power relational issues, were critical factors affecting the progress of the project. The following figure graphically illustrates three categories, which exist as underlying components of the sub-theme *Stakeholder Relationships*.

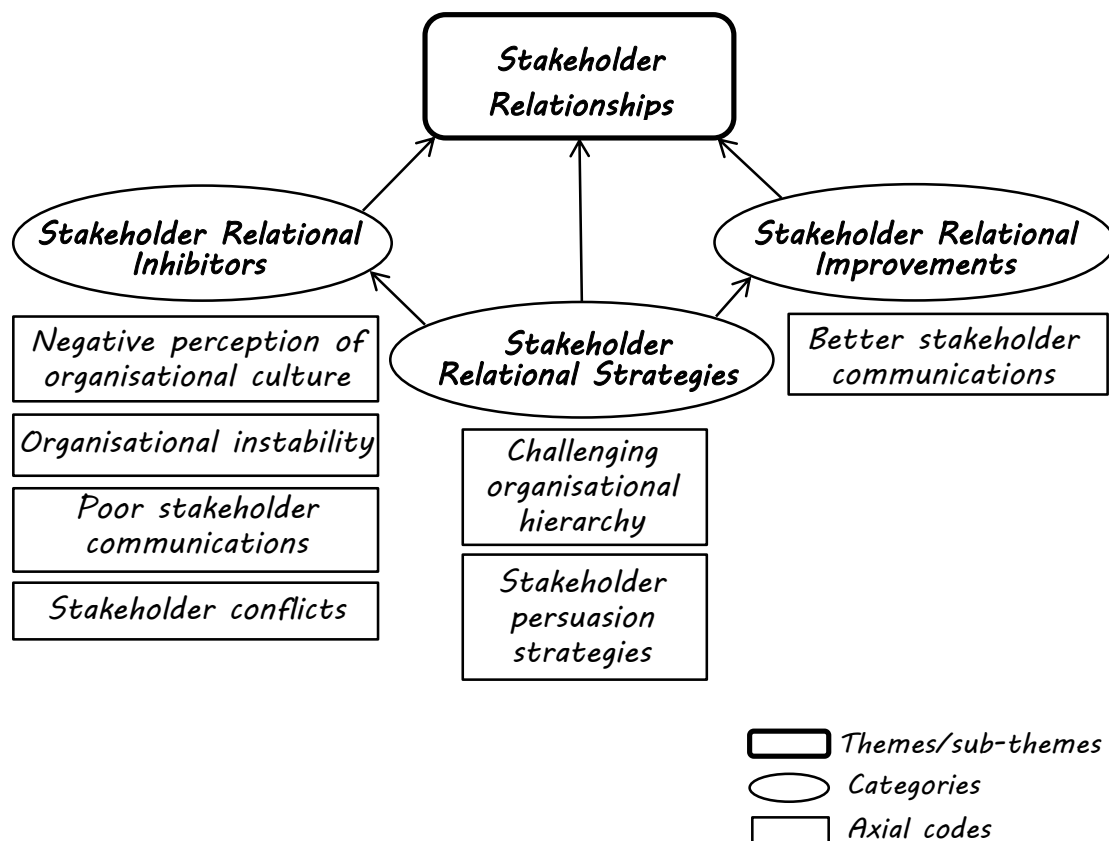


Figure 4.3 Relationship of identified categories to sub-theme ‘Stakeholder Relationships’

Category 1: *Stakeholder Relational Inhibitors* relates to the human relational issues between different project stakeholder groups that slowed down the progress of the SS

project. Category 2: *Stakeholder Relational Improvements* relates to the improvements with respect to stakeholder relationships. Category 3: *Stakeholder Relational Strategies* relates specifically to the strategies used for managing the stakeholder relational issues, which then positively influenced the project. Figure 4.3 above will be used throughout this section as a basis for discussing these categories and the codes central to their existence.

4.4.1. Category 1: Stakeholder Relational Inhibitors

A category identified from the multiple stages of analysis is *Stakeholder Relational Inhibitors*. With a new system and new technology to be embedded in an organisation, an IT project inevitably involves organisational changes. From the data obtained from the interviews and observations, it became apparent that there existed a weak collaborative philosophy among the SS project stakeholder groups in AsiaPac University. It had been disclosed that the human relational issues between different stakeholder groups largely jeopardised the success of the SS project. Instances of the evident human relational inhibitors included:

- the negative perception of the organisational culture of AsiaPac University,
- the instability in AsiaPac University,
- the ineffective communications between different project stakeholder groups, and
- the specific stakeholder conflicts that occurred in the SS project.

These issues will be discussed in order to provide answers to why the SS project struggled to meet its objectives. Before getting to the discussion of these issues, Table 4.4 below illustrates evidence of the analytical development of this category. It is these associated codes and relationships that will be of interest for describing the category.

Examples of Open Codes	Axial Codes	Category
University culture being too bureaucratic, university culture was too meeting-driven, university culture being easy and slow, too authoritarian organisational environment, university culture of indecision, too participative university culture, political university culture, university culture of flexibility with processes	Negative perception of organisational culture	Stakeholder Relational Inhibitors
High university staff turnover, organisational changes inhibited the project	Organisational instability	
Lack of business engagement, lack of project engaging with business, lack of senior engagement, lack of senior group attentiveness, business-project disconnect, lack of business making decisions, ineffective change management, lack of business support, lack of senior support, user disbelief in project go-live, ineffective reporting from project upwards, alignment with project perceived negatively by business	Ineffective stakeholder communications	
Project-senior conflicts on deadline, project leader resistance to senior group, antagonism between project and Research Division, tension between business and external specialist, long term antagonism between project and IT Division, potential business-project antagonism	Stakeholder conflicts	

Table 4.4 Analytical development of category ‘Stakeholder Relational Inhibitors’

The following sub sections describe specifically each of these stakeholder human relational issues that impeded the project.

4.4.1.1. Negative Perception of Organisational Culture

One of the stakeholder relational issues that emerged was the organisational cultural difficulties as perceived by the participants, mostly by the SS project staff. The negative perception of AsiaPac University culture was interpreted by participants from different angles; while some people perceived the university culture to be overly bureaucratic

and even coercive, others portrayed it to be too participative to reach an agreement or make a decision.

The following statements indicate, negatively, the political aspect of AsiaPac University's culture. The terms that were commonly used included 'authoritarian', 'bureaucratic' and even 'bullying', as presented below:

"This university, there is a lot of playing going on, there's a lot of politics going on in such a small institution as this one, it's surprising. (...) I know [AsiaPac University] went through staff survey sort of thing recently and the top thing in school there were leadership was bullying. The whole culture of the university was bullying and that kind of authoritarian thing or it wasn't a pleasant place to work. Maybe that's some of the things that you see quite a lot, more undermining, and dishonest, deceitful. I think that's what you have to deal with here. It's not a very good picture. I think it's probably more political charge because of the location, so it's original centre where once you are in a very senior management role in this area, it's very hard to get another role at the same pay level or authority level, so people would do whatever they can to keep their job in their situation, so it's not very good" (a project middle manager, PM4, lines 244-245; 598-607).

"The university is truly a highly political environment. It's not clear lines of authority who has right to ask you to do something. (...) And there's a lot of power, groups of power within the university that are outside the official organisational structure. So if you are friendly with the right people, or you've a group of people that are friendly to each other who may not work in the same area, or maybe some of them do and some of them don't, but they will look after each other, and they will work together to get things to happen the way they would like them to, which is outside the kind of direct reporting lines that kind of exist structurally in the organisation. That's why I say it's a highly political environment, because there's a lot of that" (a project IT worker, TW4, lines 491-492; 495-503).

“I also think it seems to be very political here and there is quite a lot of high levels of politics. There is also a lot of I guess bureaucracy or politics that happen at a high level that seem to have an impact down here, so sometimes it’s [SS] meetings, and they are a lot better now, but there was a time where people were just talking about all this high level decision sorts of politics stuff that didn’t really have any bearing on getting this done” (a Business Analyst, BA3, lines 44-49).

It appeared then that the bureaucratic aspect of the organisational culture within this university led to the perception that the university culture was too meeting-driven. In other words, the SS project staff felt hampered by a large number of meetings that led to inefficient decision making, evidenced by the following quotes:

“It’s a very meeting-driven environment. I think it’s reflected in the university environment. Actually I think it would be bureaucratic rather than democratic. Very committee-driven, very ‘representative group’, very ‘we can’t make a decision unless we have three meetings’ and then after the second meeting suddenly it goes like they don’t actually like it and we have to start again. (...) Without actually any decision at the end out of the process, and that will be the difficulty, or decision that no one has actually agreed with (laughter)” (a training agent, TT1, lines 118-126; 132-133).

“(When being asked ‘so the university is a bit too bureaucratic than democratic?’), correct, and if it isn’t that it’s almost anarchic. (laughter) (...) In terms of movement and decision making as if time and money mattered, it’s naturally strongest in a private sector, it’s weaker in government and it’s probably weaker again in universities as in they are like government used to be. And any place you would find out I suppose in my experience the stand on intellectual prowess. ‘We need to debate this because you need to understand my views, and in doing so, you need to hear and appreciate how bright I am’. You will only find that in a policy environment, in a government agency for example. (...) Certainly when I arrived in May, June last year, that game about the dominant paradigm hadn’t been confronted here, in that way you can hold

meetings about issues for a year and not care about the cost but having meetings rather than taking a decision” (a project middle manager (change consultant), PM1, lines 191-192; 196-203; 377-379).

“You never want to be in a meeting with more than a certain number of people because then you don’t actually achieve anything. If you have a meeting with ten people you are not going to get decisions. If you meet with three people and people who are identified as having the right power to make those decisions then... So it’s always I guess step in back outside of university. Someone organises workshops for you, you think it’s three people or four people, and then ten people show up, it’s just, you know, generally waste of time” (a Business Analyst, BA3, lines 280-285).

The indecision of the university was interpreted differently by some participants, and appeared to be the result of the university culture being overly participative. In particular, the overly participative environment led to too many discussions so that it was difficult to decide or agree on matters. The following statements reflect the overly participative and slow culture in AsiaPac University:

“I think [the third Project Director] has turned around that degree of control, that said in the environment that we’re working here is strongly participative and collegial environment, and it’s not something that we can ignore in this project really, you need to engage with these stakeholders” (a project leader, PL1, lines 531-534).

“It’s a certain lethargy as well I have notice. Again whether it’s a [the state] thing or..., I am not sure what it is, but this is certainly a sense of being slow, easy and comfortable. It could be a university thing” (a project leader, PL3, lines 179-182).

“The university is sort of typically doesn’t stick to timelines very well, like when it comes to course approval processes or unit study, decide what they offer, those

sorts of things impact us all the time” (a project middle manager, PM4, lines 40-41).

“The university employees, I think we are all pretty used to, it’s a pretty democratic environment really, you are not telling each other what to do” (a project IT worker, TW1, lines 222-224).

Due to the overly participative and collegial culture within AsiaPac University, the university staff were able to be flexible with either processes of their work or system configuration. That is, the old system allowed the university staff to customise it according to their needs in how they wanted to do their work. The flexibility in culture made it difficult to realise the organisational change which the SS project was bringing in, especially with the implementation of an off-the-shelf software product. Many participants noted that the university culture of flexibility with processes was a critical factor that constrained the SS project, suggesting that:

“It’s also an element of flexibility of what they can do and what they are going towards is something like locked down with rules and you have to follow what the system does, you make a change, the impact just, like, blows out. So they can’t continue doing that and that’s a very big cultural shift for this place particularly” (a project middle manager, PM4, lines 451-454).

“One of the reasons for that and this is what happened, again, this isn’t unusual to [AsiaPac University], is that the system we are facing is I think 28 years old. So over the last 28 years it has been customised, customised, customised. So when the [Research Division] wanted to do this thing, someone would go up there and they would code that thing, so then the [Research Division] obviously used this really really bespoke functionality, you know, customisation” (a project middle manager, PM3, lines 241-245).

“There’s never been a change-free period of life which most people would be surprised about coming into the project and say ‘you can change your current process and rules and...’ The current student system is still constantly being

changed. (...) I went to [a different university] for [the vendor] conference and we met with their [project (which implemented the same sub-system for timetables)] person, and they had 97% building utilisation so she said ‘lecturers here are happy if I give them no lecture theatre at all’, whereas in [AsiaPac University], because we have something like 30%, you can argue, move things and all sorts of stuff, the thing is we don’t get any of that here, because they would know this is what it is and they are just used to it, whereas [AsiaPac University] was very luckily flexible with certain things they did, (laughter) so just different culture. That’s why [AsiaPac University] is different from anyone else” (a Business Analyst, BA2, lines 185-187; 815-821).

“We are very agile as an organisation. We can make a business rule change at any point anywhere, which is terrible for our students, terrible for planning, but you are going to step into a space where you have to get sign off from God before you can make a change to something, well, that’s going to be met with a lot of resistance. So in terms of acceptance and a happy client, I don’t think it’s possible” (an IT Division manager, TM2, lines 497-501).

“I think the huge pain, I fully expect a lot of pain. My experience at [AsiaPac University] is that it is extremely flexible in what it will let people do. If I’m a student and I want to study in a particular unit, if I say ‘please, please, please’ to the lecturer, they will let the student study it” (a project IT worker, TW3, lines 59-60).

“One of things that make this such a difficult project for [AsiaPac University] is that we have had very customised and tailored systems that can be changed almost daily, because somebody in some section wants to offer some bizarre exceptional course, for example, because there’s five students that would like to study that way, and that’s great, because we can adapt our system to do that, we can get those five students, offer them the course they want, but you can’t do that in the new world with streamline systems that are as much as possible off-the-shelf that are common to what other universities are doing, you just

can't have that degree of flexibility. That's part of the organisational change that needs to happen" (a project IT worker, TW4, lines 224-231).

As can be indicated from the above statements, the university culture of being flexible with business processes and systems was a potential cause of user resistance, to change that the SS project would make to the way how the university staff worked. This culture of flexibility was also reflected in the frequent changes that were made to the business processes during the SS project implementation. These changes caused the organisational instability, which further inhibited the project (see the following section).

4.4.1.2. Organisational Instability

A second stakeholder relational issue was the organisational instability. The organisational instability included various organisational changes that were occurring during the SS project, and high university staff turnover. The organisational changes included, for example, university staff re-profiling, university restructures, university plan and direction change, changes in courses and units, and various business systems change. These changes had negative impacts on the SS project, as suggested:

"We have been impacted by (organisational staff re-profiling), quite substantially. If there is any organisational change, say they merge two schools, that's going to impact us. (...) The amount of changes that goes on in those areas is phenomenal. There have been changes in courses offering, or new courses, or new units, or changes structure, and that Committee has got a 700 page supportive document every couple of months of changes of that nature" (a project middle manager, PM4, lines 38-40; 42-47).

"There's two other areas are worthy of consideration. One is scope creep and the other is around risk and risk escalation. So whatever key risks are changing, and those risks may change as a result of internal projects issues, or they could be results of changes in the external environment to the project. If you look at the risk profile around our project at the moment, external, there are things like

curriculum change going on. There are things like professional services review going on which affects users out there in faculties and schools. There is organisational change as well going on in terms of school rationalisation in faculties. And both things will all have an impact on this project. (...) The risk is you destabilise your support resource, the work force, because they are going through the workplace change as well as business system change” (an IT Division manager, TM1, lines 163-172; 185-186).

“everything is changed, you know, we still have enhanced systems, because you can’t lose things for seven years, six years, not move forward. We’ve had changes in commonwealth legislation. We had changes in the way we do things with the restructure internally, different policy decisions, and massive changes in terms of the project and staff in the project as well as the senior management staff restructuring how senior management work, and a whole range of other things. So, you know, basically everything is changed, which is also, as it’s happened all the way along, contributed to part of the issues around this project” (a business administrative manager, BS1, lines 126-132).

“The latest thing that is going on at the moment is increasing frustration of business changes, that is changes that are happening in [AsiaPac University] that impact on [SS] that we have kept on saying we need everybody to be aware of, but they are not doing so. So the big ticket issue now is three faculty restructures, divisional restructures, change in finance, IT system, all these things impact on [SS]. And there supposes to be a process where everybody has to put in a business case for the change they do and it should all come pass [SS] for an assessment of its impact. That hasn’t been happening” (a senior management member, SM5, lines 375-381).

“One thing that’s affected us a lot is curriculum changing all the time, so creating new courses and units and offerings, for all of these things, just continually, which is not what normal universities do, and that’s the words that our [vendor consultant] uses a lot, she said ‘normal universities don’t make curriculum changes less than a year out’, so say one new course, they will create

it at least a year beforehand, so all will be set up in the system and will be all ready to go, but [AsiaPac University] doesn't do that. We do it on the fly. (...) It comes down to the importance being given to the project and really dictating to the faculties that they shouldn't go making changes until the project goes live, so it's hard because it's a bit of balancing. They have to continue with business as usual with the current system" (BA4, lines 430-433; 435-440).

"There has been major restructure change. So that's the result these key people who have had input into this project have gone. There're people who once upon a time might have fulfilled those functions and obviously they're gone. So what I've found when I go around actually talking to the school level people, they're like 'oh we don't have anybody, we've got academics who are doing this administrative work on an academic salary, because we don't have anybody here anymore that does that for us'" (a transition support staff, TO2, lines 113-119).

These changes were made during the SS project pre-implementation phase. It was noted that, when the decisions of the changes were made, there was a lack of consideration of whether the changes were going to fit the new system that was to be implemented. A Business Analyst suggested:

"Things like fees, so for example, [a particular fee change], the way that the university has chosen to do that, from my understanding and I'm very much on the periphery of this decision, was that the university management got together, made a decision, and said 'we are going to do it this way', and then it doesn't actually fit with how [the SS (new system)] does it. (...) No one from [SS] is actually involved in those discussions. So, well, they can do it in their current system, the way they decided. From the future perspective, they are not going to be able to do that. So they've introduced new fee and not actually paid any attention to the way that is going to be changed in the future. (...) I think senior management needs to start agreed on things themselves, 'we are not going to change fundamentally what we do unless we consult'. If they want to change something that has no impact on the project, then the project would just say 'oh

that's fine you can, that's nothing impact us', but what they have just been doing I think is going 'we do this, we do this, we will do that', and the project is going and has to react to all of those changes, and actually go back to review things and change things" (a Business Analyst, BA2, lines 151-154; 161-164; 225-230).

Importantly, the instability caused by the organisational changes led to human emotional and relational changes. In particular, these emotional changes were presented in the increasing and overriding emotion of anxiety. This appeared to emerge from a variety of sources such as fear of change, change fatigue (i.e. being tired of change), paralysis (i.e. inability to cope with change), which could lead to resisting and sabotaging change, which was substantiated in subsequent interviews by statements such as:

"There's a period of change going on within the organisation. What it does is it increases the risk around either change fatigue or change paralysis. Fatigue is really when people get sick of the change. Paralysis is when so much change goes on that they, the change causes paralysis that they stop doing what they're doing because it's impacted by the next level change. They won't do something because they worry about this change over here" (an IT Division manager, TM1, lines 205-209).

"The timing of your research is really interesting in that falls across this whole period of change in [AsiaPac University], [the staff re-profiling], the academic staff restructure, because they are widespread change initiatives, there's been huge resistance and huge fear, a lot of people in the university. Whenever you've got that more changed kind of environment, those types of political alliances either get really tight and stronger, or they also get stretched and working down sometimes. So, you know, part of what we've seen early on in the [staff re-profiling] is a number of key figures who are reasonably powerful figures within the university working in the university and being pushed out or just being no longer to be part of it anymore, who traditionally had a lot of

power not just through the position they had but through the influence they had” (a project IT worker, TW4, lines 503-512).

Another interesting finding is that senior executive turnover could negatively influence the SS project due to subtle political reasons. One of the reasons why senior management of AsiaPac University did not diagnose enough of the problems that were plaguing the project was senior executive turnover. A senior management member suggested that the turnover of the University Vice Chancellor (VC) largely slowed down the SS project:

“My understanding is that University Council and the Finance Committee in particular towards the end of [a former VC’s] reign were getting more and more frustrated about, they asked ‘what’s happening in this project? It’s costing us lots of money but we are not seeing much progress’. So (in) the last year of [the former VC’s] reign, that became more and more obvious, again, not a judgmental comment, but when Steering Committee knew he was going, it’s someone else’s problem, it’s the next change, next project. (...) We knew there was a problem, (it) wasn’t progressing. In [the former VC’s] last year, for example, it wasn’t a priority. It’s a little bit like ‘this is a big problem, I don’t need the headache now, so I’m not going to raise it (to) Council’, and probably thought ‘there’s no point in beating [the former VC] up about this. Well, let him go out. What’s the point? So we wait until the new person gets here’. You can actually argue there you probably lost two years in the project there” (a senior management member, SM1, lines 48-53; 183-187).

The negative impacts on the SS project that could be made by senior executive turnover was also underlined by a project manager, who suggested:

“I would say unrealistic expectations, constant change in leadership out there. So every time they change a manager or Associate Dean or a Director or DVC (Deputy Vice Chancellor), they got a new agenda, so the instability. I think it’s mostly about politics and its pressures that they’re getting from the outside, the funding changes, focuses, that sort of thing. We ended up with the DVC I don’t

know when this one expires, but if we have some new DVC before we get this thing going, we're in serious trouble. That's what usually happens: the new VC comes in, changes all the structure and changes faculties, schools, and some of the decisions they've made haven't exactly worked out" (a project middle manager, PM4, lines 42-47; 542-549).

The above discussions indicate that the university staff turnover and various organisational changes that occurred during the SS project were among the human relational factors that limited the project progress.

4.4.1.3. Ineffective Stakeholder Communications

Stakeholder communication issues emerged and have been coded as a third stakeholder relational inhibitor. The following statements provide evidence of how participants described generally the ineffective communications among different stakeholder groups within AsiaPac University that further inhibited the SS project:

"This is a bit of issues that we all had several times with [SS] in terms of decision making and communication and certain people basically deciding how things would be without what we considered to be a necessary level of communication with other people in the university to see how it affects them" (a project IT worker, TW2, lines 183-186).

"It's a game where parties didn't know how to spoil the old way of operating so that you could be successful. So the programme didn't know how to change the Executive, and the Executive didn't know how to change all the Deans, Associate Deans, and anyone else who's involved in the game making decisions, so both parties were complied in the game that couldn't succeed, so throwing a lot of money against the wall" (a project middle manager (change consultant), PM1, lines 208-212).

"What was seen was 'hey this software can do it, so let's get the software to do it', but we did not invest in actually the other stuff that has to happen around

the organisational change, and you know, the communications and all those other things we didn't invest in" (a project leader, PL2, lines 102-105).

In particular, the lack of connection between the SS project and AsiaPac University business areas was a major concern among the stakeholder communication issues. A Business Analyst noted the issue of project-business disconnect:

"I think there is in a sense that the [SS] project is still so removed from the business area which is actually supposed to be working for" (a Business Analyst, BA2, lines 619-620).

A project manager also said:

"We were told that it had been a difficult project to get any traction on because the university was hard to get the sort of interest from the business, if you like. The project was being alone up here on the hill but The project was being alone up here on the hill but they had trouble getting interested people from the normal business operations to make decisions and help the project to push forward in same direction, so that was what [the second Project Director] was focusing on when I first started but he wasn't having a great deal of success. (...) Because there was no interest from the university, then it seemed the 'not the right thing to do' was to show [SS] in their face, when we weren't really clear what we were doing as a project anyway" (a project middle manager, PM7, lines 16-21; 28-30).

The above quote indicates that the project manager interpreted that the project-business communication issue was due to the lack of interest and engagement from the business stakeholder group. This implication was further substantiated by the statements made by other project staff:

"The business actually doesn't put enough effort in, they think that this package will solve all their problems, so they don't put the effort into specifying what exactly they want, and then be totally disappointed that the computer package

doesn't deliver, but it really needs work between the business and the company that supplies them with the package" (a Business Analyst, BA8, lines 271-275).

"My gut feel is the governance model that they put in place is too complex and can and probably will slow down decision making, because the real problem, the real problem, yes they needed additional levels of governance, but the real problem was the business was over there, the project was here and 'we are too busy, go away. We already told you the answers. We are too busy.' That was the problem" (a project leader, PL5, lines 234-238).

"I think there's a worn-downedness in the business side of place which is 'how long is this thing going for', 'when should we show interests', 'what would I care about'. I think there was a complete resistance to corporate-wide decisions have to be made so we do things in a common fashion, because the history of all universities that I know, certainly this one makes no difference, is that 'I do what I want in my faculty, fuck all of you, see you later'. Certainly when I arrived in May, June last year, that game about the dominant paradigm hadn't been confronted here, in that way you can hold meetings about issues for a year and not care about the cost but having meetings rather than taking a decision" (a project middle manager (change consultant), PM1, lines 373-379).

However, the business stakeholders interpreted the project-business communication issue differently. A senior management member identified that there were different interpretations of the communication problem between the project team and the business staff group:

"There is a history which has several interpretations. So what you just described is a little bit of the blast of a rather bitter past, where you would hear argued that it's the business not engaging, or not knowing their requirements. From the business end, it was perceived as a system that was inflexible and therefore it was not able to actually accommodate the needs of the business" (a senior management member, SM3, lines 108-111).

The business stakeholders perceived that the communication issue was driven from the fact that the project was not engaging well with the business area, not vice versa. It was commented that:

“Probably there was a big disconnection between the business and the project earlier on but I don’t think that was due to the business not supporting it. I think it was just more they probably were a little disengaged with us because they had so much other going on in the [SS] world” (a business administrative manager, BS2, lines 28-31).

“There probably was not a lot of engagement with the actual business. It seemed to be two very separate things. (...) I have had time off and when I came back I felt very, you know, you get this disconnect when you have a bit time off, and I was desperate to come back to work because I knew this was what’s going on. And it wasn’t until earlier this year that the link weren’t re-established with [SS], and there was this, I felt separate, I felt a bit distanced from it, and then there was this perception from the [SS] team that I wasn’t interested. I think communication from my perspective was a bit of issue, and so I found it very difficult to reengage” (a business administrative manager, BS5, lines 34-35; 93-98).

“It’s also a communication issue. Another big failing of the past is that the project rather communicated with itself, so at the angst, as it was, between the business end and the project end, was really concentrating in a few key individuals, and from the university perspective, it just seemed like another big IT project that was going off the rails” (a senior management member, SM3, lines 118-121).

“One of the key things that I noticed is that we’re seeing, on the business end, especially like myself and the other [transition support staff], we are spending a lot of time going around, gathering information and feeding them back in to the business and to the project, but we don’t get given very much information when we need, so for example, if I said ‘okay, how is this going to work, give me the

nuts and bolts, the nitty gritty of how this is going to work for this experience or for this particular scenario’, and we will go and ask the relevant person in the project and give them a briefing paper and we will give them all the details, and we don’t get any answers” (a transition support staff, TO2, lines 309-316).

The above discussion provides an indication that different stakeholder groups perceived and interpreted issues differently and they tended to share the same attitude and interest within their stakeholder groups. It was apparent that there was a psychological barrier between the project team and the business staff group. This psychological barrier was further exacerbated by the fact that the project staff, who were seconded from business, made decisions in the SS project instead of consulting with the current business staff. The original intention of the secondment was that these seconded staff had the business knowledge to inject into the project. However, this action disconnected the business and the project because there was no real communication to easily occur between the two stakeholder groups. A project leader described the issue:

“Our second issue that I would categorise has been the way, in 2010, when the project review happened and two people were seconded from the business as Director and System Director, at the time that was a very good move, it gave a lot more connection, but over time, the project and the business separated, so decisions were being made within the project that the business didn’t have this ability of, so the connection and engagement wasn’t so efficient. (...) The former business person (the Assistant Project Director) making decisions and he was quite a powerful individual, so within the project, couple of examples, he controlled information consciously, so kept information to himself and tried to channel decisions through himself. By doing that, he also controlled resources. So what got done was what he wanted to get done because he provided all the information. So from the user or business community, they knew what he wanted them to know, so very much that power influence in the centre of that. By moving that person out of the project, it has been painful but the business has become more empowered” (a project leader, PL4, lines 109-113; 190-197).

This issue was further confirmed by a business stakeholder:

“There was a number of people that were seen kind of out of business positions to work in the project. Overall, that hasn’t worked very well. (...) The connection between the business and the project has been an interesting one for a long period time. (...) For all the right reasons, that was how they saw as connecting the two things. That would connect it but they didn’t connect it. It actually did the opposite. (...) Because they brought a knowledge and that was set up in a particular way to work, the line blurred between the business injection and where I needed to be actually skill set to look at redesigning process and moving it forward, and then over time they became disconnected with the business in terms of the operational business, and then they started the tension there” (a business administrative manager, BS1, lines 143-145; 150-151; 163-164; 172-176).

A project manager also said:

“In my first year here, I felt this was the [SS] project according to [a vendor consultant] plus [the Assistant Project Director (seconded from business)], because every decision had to go through [the vendor consultant] and [the Assistant Project Director]. Even the outcome was determined by [the vendor consultant] and [the Assistant Project Director]. Nobody else had a say in anything. Everything had to go through [the vendor consultant] and [the Assistant Project Director]. It really bothered me that there were a lot of complaints about the business not being involved in the project but the business was pretty much shut out. [The Assistant Project Director] made all the decisions. [The Assistant Project Director] didn’t necessarily refer those to everyone in the business. It was all from inside the project. It appeared very much that [the Assistant Project Director] made all the decisions. I had great difficulty getting information from outside the project” (a project middle manager, PM8, lines 159-168).

More interestingly, the psychological barrier between the project and the business was further reflected in the following statement made by a project leader who suggested that being aligned with the SS project was perceived negatively by the business:

“I guess the other observation from me will be when we, back in 2010, seconded two people from the business: a Director and a System Project Director. The relationship between the project and the business was very close. There was a lot of influence in both directions. As the two people involved in the project became project people, that influence separated greatly, never quite became antagonistic, but by the time in June, we moved the business people off again, it was actually a relief for the area that they came from. So what I observe, there was influential close relationship. People moved here, maintained the influence, but then these people almost assimilated into the project and went to the dark side” (a project leader, PL4, lines 167-174).

Further, the communication between the IT Division within AsiaPac University and the project team was also a major concern, addressed by a business administrative manager:

“They (the IT Division) have one person that is 50% who was appointed two months ago, and so [IT Division] haven’t (engaged enough), and to be fair to them, through the [SS] process, I don’t think the communication between the [SS] Project and [IT Division] has been very good. (...) I think to be fair to [IT Division], I don’t think that the [SS] Project have engaged very much with [IT Division]. I think [IT Division] had been on very uncertain ground as to what their role is in a future state, and I still don’t even know if those things have been answered” (a business administrative manager, BS3, lines 273-275; 280-281).

The lack of collaboration between the IT Division and the project team was then further identified, mostly by the project team, as a result of the lack of engagement and support from the IT Division, as indicated in the following quotes:

“He’s (the IT Division CIO) got a level of interest and place in that, senior [SS] caring sharing area, but I don’t think he’s helping hugely in the process of moving [SS] forward” (a project middle manager, PM7, lines 541-543).

“It is hard, particularly in IT (Division), if you look at what they’re currently doing, they’ve got a whole range of projects that are running at the moment, plus as an institution. We’re trying to take a program live, an institutional wide changing program live, and it kind of gets to this point of [the CIO] right now, ‘why are you dividing your attention away from this huge change that’s about to come through’, and it must be fabulous for him to turn around and say ‘all of our video conferencing is up, we’ve done our [instant messenger] upgrade, we’ve done this, we’ve done this and this’, right, fantastic, but is that actually in best interest of the university when the project’s access to the resources that they need are inhibited because you’ve got them doing other stuff?” (TO1, lines 557-565)

Moreover, the communication between the project and the senior management group within AsiaPac University was another major issue. Many SS project staff advised the lack of senior engagement, attentiveness, and support:

“There is also the element that I don’t necessarily think that the senior management were as engaged as they should have been and as a big supporter as they needed to be” (a Business Analyst, BA2, lines 389-390).

“A major fundamental issue is the sponsorship. The Executive wasn’t clear with the project. So [the second Project Director] reported to, I think, this group of bodies, who didn’t necessarily give enough attention to [SS] as to what’s defined what they were responsible for. (...) Who chaired Steering Committee wasn’t clear, what was the merit of the Steering Committee wasn’t clear” (a project middle manager, PM3, lines 222-224; 232-233).

“I think the issue we had with [SS] was that there was a lack of senior support. There was senior support in terms of what they would say but there was not at

the top level, and this is higher than [the first Project Director] like a Sponsor level, that was really saying, in all of the senior meetings, ‘we must have this, we must have this, because...’ It was always seen as ‘oh well, we need to replace student system because it’s getting really old’, and we’re basically bringing this thing in. And by the time I got there, we’d already been through two revisions of the budget. And I think by going through revisions of the budget to take it from a 7 million dollar project to like a 9 million dollar project and then went to a 22.7 million dollar project and now it’s 30 something million dollar project, it was just, the whole reasons for doing it were not driven from the top level” (a project leader, PL2, lines 26-34).

“To me, that’s part of that disconnect between [the senior management group] wanting the university to move in certain directions but not fully supporting that and then you kind of get people in projects, trying to implement something that’s not fully supported by most senior level in the university. (...) He (the former Project Sponsor) had far too much to be doing elsewhere in the university than to be worrying about the machinations of the project” (a Business Analyst, BA1, line 253-255; 686-687).

In the interviews with senior management members, some senior executives admitted the lack of their engagement with the SS project, but also identified the lack of project engaging with them:

“I’ve spent quite a bit of time trying to keep completely as far as possible from [SS], partly because I am not an IT type of person, and I also believe that most IT projects are heavily over-advertised by their advocates and nearly always come over budget, always under specifications, so I’m not actually a keen participant in such projects. (...) [SS] to me has all the hallmarks of the very kind of projects which I think could well produce another major cost overrun and a major under-delivery” (a senior management member, SM2, lines 9-12; 16-18).

“Really I didn’t become engaged in [SS] because [SS] really slipped off the Dean’s radar. I think most people knew there was stuff happening at the background

but even at our Head of School level, you weren't engaged in the process associated with the project. It was kind of like, the concept was going around 'oh this thing, [SS], when is it going to surface and when are we ever going to have this system'" (a senior management member, SM5, lines 22-26).

It was pointed out then that, due to the lack of senior support, there was a lack of authority to drive and lead the change that the SS project would bring into the university. Having an authority to drive and lead the change was underlined as a necessary enabler for the SS project, as suggested by many in AsiaPac University and those in the SS project team:

"One key issue has been the level of senior executive engagement: [the senior management group] and Steering Committee etc. Up until one month ago that was a very very big problem but that has changed with [the new Project Sponsor], so [the new Project Sponsor] taking on the chairmanship. That's a big change but it is in its infancy, so at the moment I would say it's still an issue. In a month's time, if it all works, great, it would be fine. So that's been one of the biggest issues. And what that has given us is the issues around decision making, so people at the lower levels are feeling that they did not have the authority to make decisions. So a lack of clarity because of there is no message coming from the senior executive to say 'no, this must happen, this must happen'" (a project leader, PL4, lines 94-101).

"There was problem that [SS] wasn't given the importance as an organisational change, which was what it is. And so people just thought 'okay, it's an IT project, I will put it aside, it's not really going to affect us, so we won't give that time'. So I don't think we really had the support from upper management to say 'you, the business, really need to engage with [SS]', but the start of the business process design, back through that whole process, that's when the message really started to be hammered home a little bit more" (a Business Analyst, BA4, lines 92-97).

"When you work in the project, you say [several Project Sponsors] and [the VC], they are responsible for the success of [SS]. If [SS] doesn't succeed, your heads

are on the line. If that's the approach, then they would drive the bonding further down, they would obligate their staff to help [SS] because their staff would have their heads on the line. So I think that was missing for a long long time" (an IT Division manager, TM2, lines 210-215).

"For me, my personal point of view on a broader scale, the leadership and drive culturally for the university would have needed to have come from a very high level to drive to say 'this is where we are going'. Authority had to come from the top, and that would have put people in a more prepared mental state almost or would have given the lead to people" (a business administrative manager, BS4, lines 92-97).

"The problem with [AsiaPac University] is that they do not have a strong upper senior management to say 'you accept it'. (...) I think there's been a big disconnect between the people above [SS] and [SS]. Senior management, probably include the Steering Committee, I don't know, how many of them have actually done IT projects? It is the biggest project in the university history for 20, 30 years and none of them would have any experience of this, are very few. So does that mean we are going to get the support before we go live? Well, you saw what happened in [a previous sub-system rollout]" (a project IT worker, TW3, lines 81-82; 357-361).

The data also indicate that a major reason causing the lack of senior engagement was the ineffective upward reporting from the project. The project tended to convey better-than-real messages to the senior management and therefore the senior management group was receiving good news only and not knowing the actual problems in the SS project. A former Project Sponsor said:

"I remember I was new into a role with a whole of other responsibilities as well and other issues which made it pretty challenging to be across the [SS] one, but the mistake I certainly made was once we had [the second Project Director] on board, I did pull back a bit, so I thought '[the second Project Director] is here, this is now opportunity for [the second Project Director] to step up and certainly

you would dive in, understand it and keep me aware' (...) Certainly a lot of issues haven't made their way up to Steering Committee. Certainly Steering Committee hadn't been asking the right questions. I wasn't close enough to it. [The new Project Sponsor] wasn't close enough to it. [The Steering Committee Chair] hadn't picked up on lots of issues. [The CIO] in IT hadn't picked up lots of issues. And the whole thing was really quite shambolic in terms of where it was, and I think if you are going to point the finger, you certainly point it to myself, [the new Project Sponsor], [the CIO], the Project Director was obviously hopeless" (a senior management member, SM4, lines 71-75; 105-111).

The untruthful reporting was further evidenced by the statements made by many project staff and also senior management members, who suggested:

"They may have been misinformed. You can say things but could be partially true or not really give the full picture, and appear more rosy" (a project middle manager, PM2, lines 222-226).

"I imagine both project level people and the executive began giving better-than-expected news to the Steering Committee and then Council. (...) My hunch is they were being somewhat fudged about the real circumstances themselves. They then joined in consciously or subconsciously fudging upwards to Council. (...) I think historically they (project sponsors) didn't know when they were being snowed. They got smart about that but then perhaps they participated in the continued snowing upwards" (a project middle manager, PM1, lines 149-150; 355-356; 518-519).

"Last year (2012) shock is [the second Project Director] lying effectively and making statements about the project to Steering Committee were untrue, because I know internally in the project we were making it abundantly clear what the issues were, and [the second Project Director] was choosing to ignore them and putting it as a lovely fluffy, 'everything is wonderful' picture out of Steering Committee" (a Business Analyst, BA1, lines 155-158).

“I think he (the second Project Director) would have protected himself and I don’t think he would necessarily have been honest about things were not going well. (...) It was very obvious that things were not going well. It was very obvious that the communication wasn’t going up higher” (a Business Analyst, BA7, lines 155-156; 500-501).

“To be honest I am not clear about the communications above [the second Project Director]. What I am clear about is the message that people like I was giving to [the second Project Director], either they got lost in translation or ignored above that. So we were saying ‘no way we are going live like this, so far beyond reality is almost laughable’, whereas the top people would be saying ‘oh yeah I think it is still pretty likely’. So somehow they got lost in translation at some point. So where that was, I don’t know” (a project middle manager, PM3, lines 153-157).

“They’d been misleading the Steering Committee for all the time I was here. They didn’t tell them the truth. They tell them this much. They wouldn’t give them the detail. They’d say that everything was heading along on schedule except it’s not. They couldn’t possibly have given the real picture. It was a bit shock to the Steering Committee. I don’t think anyone in the project team believed anything they were told ‘everything is tracking along nicely’, and no one believes that” (a project middle manager, PM8, lines 191-197).

“The core person we brought in to be capable and responsible for this thing had probably been, in my opinion, less truthful around where the project was, whether it was coming through, and therefore, there was this sense of wellbeing at the Steering Committee when in fact things were sliding, moving off the rails. (...) It’s almost like a Ponzi scheme. And we got to a point where it was obvious it was all going to implode and he left” (a senior management member, SM4, lines 111-115; 121-122).

On the other side, however, the second Project Director suggested that the lack of senior attentiveness was a factor affecting the upward reporting from the project:

“We’ve got a lack of attentiveness at the senior executive level, because they’re so busy. And you know, frankly, if I get asked a question, ‘are we on track?’, and I say ‘yes’, and people turn off, and concentrate on something which is more, you know, which is on fire. So ‘if I like I will give a really short look, everything is okay’. They did something which is no opinions. I can tell nobody really wants to think about it, the consequence of doing that” (a project leader, PL3, lines 303-310).

Being afraid to convey bad news and lack of senior support were further summarised as the reasons for the untruthful reporting by a project manager, who said:

I think we as a project, I think we are scared to take it up. One, it makes us look bad; and two, the argument will be ‘well, you don’t have time for two months planning, just get it done’” (a project middle manager, PM3, lines 192-194).

The project being too afraid to report the truth, and even the senior management being too scared to report the truth up to the Council, were also identified as due to the dictatorial senior management style, evidenced by the following statements:

“Absolutely they won’t tell them just the truth, whether it’s good news or bad news. They would find it hard to have a truthful conversation with the VC. I mean that’s only one part of the story for me. The other part of the story which I think where you would build on multiple, if you look at the three root causes for issues in [SS], the dictatorial senior management is one of them” (a project leader, PL5, second interview, lines 465-468).

“I always think in Vice Chancellor’s case particularly, no one say no to him, there’s a lot of fear in that. They won’t speak up against him. (...) I think this is a very poor management style. He’s (the VC) not either interested in hearing about it, or no one, in early days with warning signals, people won’t carry those to him” (a senior management member, SM1, lines 376-377; 383-384).

It became apparent that the communication between the senior management and the project was affected mutually and negatively. From the perspective of the project

team, the project did not tend to deliver fine details since the senior management was not showing interest. The senior management, on the other side, did not tend to dig down further since it was reported that the project was on track. A change consultant noted this mutual negative influence:

“They (the senior executives) don’t know how to know before a Steering Committee meeting, for example, whether they’re going to be snowed or not. In other words, they are not close enough to go ‘I got it, I read the entrails, I understand the game and I have five sources of information rather than the one coming at me’. So that’s about receiving. The other is I need to understand that I am a leader therefore I have to influence what happens and I have to be off my ass and getting out there and spending time with people who will be impacted by this” (a project middle manager, PM1, lines 521-526).

Another interesting factor that emerged for explaining the ineffective communication between the senior management of AsiaPac University and the SS project is that neither party perceived they could share the same background and same technical language or terminology with the other party. The inability to share the same background and language led to the lack of understanding, or even discrimination, of what the other party was speaking about, and thus constrained the communication between the two groups. A senior management member said:

“My perception would be that this (an IT project) is an area where it’s very easy to get bamboozled on, it’s very easy to think there’s just one more fix around the corner if you put enough money in it. And I think there is a fear of understanding this kind of projects as requiring the normal characteristics of any sort of projects you might think of, and being too fearful, but because there’s a lot of language about gigabytes or whatever, somehow that it’s, you know IT people, people who specialise in pulling the conversation into areas where they control their vocabulary because that’s often all they know, and very often I’m interested in the questions of the actual ways they have to organise themselves in their team and their people and how they actually relate to people. So my impression would be that, it’s really a question about how actually, that senior

management of university is populated by people who are not of a generation, where they probably know how to use a remote control on a DVD player, so once they get somebody yelling at them in some language that they don't understand, techno speak, they don't know who to trust, so it creates huge problem. (...) So it's interesting, because the languages, the concepts, the ideas, the deliverables, if you like, they are so ambiguous. And you wouldn't know who to trust and who to fire, that's the problem (laughter)" (a senior management member, SM2, lines 409-420; 430-433).

Interestingly, a project leader who was recruited from outside the university also expressed that the gap in background and technical language made it difficult to make her conversation effective with the senior academics in AsiaPac University. She said:

"Because I don't have a high education background, it's been very hard for me to understand a lot of the things they talk about in that (senior management) group. But the way this is the level of which this Programme Director needs to be at, it's actually pitched at the right level, because it shouldn't belong in just IT and it shouldn't belong in business, it should sit across both. And ideally, someone in this role would have a high education sector background in some way, I think it's actually an advantage, but in that regard, I have found it hard to blend and to mix with them, because it's actually, if you find it in business domain, any environment you are working. if you are working in mining, there is very specific language, and you know, it's very hard to talk about piano and things, they are there talking about drills. In this environment if you don't have three degrees in the PhD and Masters or whatever in certain things, it's very hard to join in those conversations. (...) They are all academics, so I find it, there's quite often a cross-function. I will be saying this. They will be saying that. I know we are not talking the same thing. They just don't get it. I mean they are not educated as being an administrator. They are educated as an academic, you know, their sphere, their area of interest is very much channelled" (a project leader, PL5, second interview, lines 40-49; 54-57).

Due to the lack of understanding of an IT project, the senior management of the university did not, and probably could not, diagnose by a rigorous level of analysis. It seemed to some in the SS project team that the senior management had ‘stamped its foot’ and made replacements of key people involved without knowing what the real problems were, as commented below:

“I think at the time they’ve got clear enough things were not working. They did what is perhaps historic of this case here, get rid of somebody or smack somebody with a big duster. (...) More of the Executive going ‘when things go wrong, I get angry, I stamp my foot, I tantrum, and I remove somebody or push them sideways. I think it was a game, I suppose part of the game I’m scared of being hit from upwards, so I’ll punish downwards, and see if that works, and if I’ve got a little bit of collusion from those beneath me who don’t know what else to do, I’ll frame the game, we all go north and account together as if we’ve got a consistent story, and everybody is okay’, rather than ‘we need to confront what we are doing and how we are behaving and how we lead’. Executives of this organisation didn’t know how to manage a project of this size” (a project middle manager, PM1, lines 356-358; 386-392).

The lack of retrospective diagnoses was also implied in the following statement made by a senior management member:

“We don’t care about what happened in the past. We’re going to get the right people to fix it now” (a senior management member, SM1, lines 197-198).

Aside from the various stakeholders’ relational issues discussed above, negative emotions of business users were also among the project inhibitors in relation to stakeholder communications. One of the negative emotions was user anxiety of unknown organisational changes that would have impacts on their jobs, as specified in the following quotes:

“People are less concerned by what tool they are going to use to do their job than what concern ‘whether I have a job’. A lot of people were anxious about it

because there were some fundamental changes” (a project leader, PL3, lines 149-150).

“Sometimes they said that because they just don’t like change, and they’re a bit frightened about what’s going to happen with them and their job, because they don’t know whether they will be able to continue or pushed sideways. And that’s why you really need strong leaders to say ‘yeah, we may have a bit of difficulties at first, this is a bit of workaround for it, but we are going to progress this way anyway, and we will train you so you know what exactly you are doing’, because I think that’s where all the fear comes from” (a Business Analyst, BA8, lines 236-241).

“I think as most of big changes, there’s a level of anxiety, some people don’t like change, some people haven’t heard about it and it’s just thrown upon them. So an institution, which as you know has already gone through a lot of different changes of late, of restructure, so this is yet another one, and there’s just been usual feeling of anxiety when big changes happen, because we change a lot. We’ve already heard a lot of anxious voices in the training sessions, anxious that they won’t be able to adapt to the new system when it actually goes live” (a training agent, TT2, lines 32-37).

Another negative emotion of business users was their disillusionment and doubt in the project go-live, given the lack of progress and the long length of the project. Moreover, a previous problematic rollout of a sub-system included within the SS project scope was among the critical factors for user disillusionment and doubt.

“There is some doubt about ‘would it really happen’ or being ‘would it look as good as you promised or other people promised’, so there’s been doubt. (...) I think one of the things with [SS] is the legacy of ‘it has been going on for quite some time’. It hasn’t really delivered anything in the meantime. [A sub-system rollout] was associated with [SS] and that doesn’t have a good reputation. And I think they probably are aware of the ripple effect” (a training agent, TT1, lines 180-181; 228-230).

“The cultural change is huge and in terms of people who have heard the word [SS] for six years, who are very busy in their own job. So there is the lack of confidence in [SS] delivering things. The only thing that has come out of [SS] is [a sub-system rollout] and that was a disaster. So confidence is pretty low in terms of that” (a business administrative manager, BS1, lines 321-324).

“The challenge is now in a sort of macro sense of running change management. There is real, if I talk to people about [SS], people roll their eyes, you know, they heard it all before. And there is a disbelief that [SS] will see the light of day” (a project leader, PL3, lines 91-94).

“This project has been dragged on years and years. The general perception around the university is ‘will this thing ever fly’ or ‘is it a dud’” (a senior management member, SM5, lines 132-134).

“Because [SS] has been going on for so long and it’s cost the university so much, there’s a lot of cynicism out in the community that A) it will actually go live and B) it will deliver the benefits that it said it will” (BA4, lines 356-358).

“I think the general resistance has been ‘this is not really going to happen therefore I’m not worried about it. I haven’t got time to worry about it, because it’s not going to happen’. There is that sort of passive resistance, by virtue of ‘it’s so far away that keeps telling it’s coming, each year they ask for more money’” (a business administrative manager, BS1, lines 460-464).

It can be also found in the above quotes that the lack of project progress led to not only business users’ disillusionment but also passive resistance or reluctance to change. This finding was further substantiated in subsequent interviews by statements such as:

“Resistance, more that for some people like ‘that’s how we do things, that’s just how we do things, so we must continue’, or not saying the need for change or not understanding the place of the objective, the outcome of what they are doing. So ‘we do this in this way, why do you do that’” (a project leader, PL4, lines 224-226).

“I think people are going to be generally unhappy, and then I’ve got a new system coming in, which they can’t do what they did before” (a Business Analyst, BA2, lines 681-682).

“People have to learn a new system when they’ve been used to working with the system for 20 plus years, you’ve always got to have that resistance to change, so there’s that to overcome as well” (a Business Analyst, BA4, lines 377-379).

“I believe for those people who have a preference for the old way of doing it, I think the resistance is predominantly the resistance to change. And I think it is a huge, very difficult thing for that change to happen” (a project IT worker, TW4, lines 255-258).

“I know that there was a lot of resistance about why we had to move to a new system. I suppose it’s just moving away from something that people are familiar with. I think there was still some of that negativity, but I think more now it’s because this has been in the pipeline for so long, people are sceptical, and I also think that people are scared of change, they realised that it has meant a lot of change and I suppose there is an element of fear in their work, even if they think it’s good, they probably think the system is working so well that maybe they are not going to be required” (a business administrative manager, BS5, lines 26-32).

Data collected from further interviews indicated that some overt resistance behaviours to change also occurred, as stated below:

“We had a working group meeting two weeks ago and there were 41 people who came, which was huge. And there were some sort of ‘anti-[SS]’ sentiment by staff: ‘I haven’t got time for this, you just need to give me punchy things’, ‘I haven’t got time for this’” (a business administrative manager, BS3, lines 404-407).

“I’ve got to say there are a couple of people who just said flat out, ‘we don’t want this. We never signed up for this’, but then I’ve had to say to them, at the moment, there is no option to opt out. (...) One person who I met with who

hasn't come to the working group obviously thinks that if you don't look over there, it won't include them, and maybe one whole faculty who just ignore me all together and didn't even engage. (...) 'Oh [SS], that project, it's been going for ten years, none of us we didn't think it would work, well now we know it doesn't do what we wanted it to do, they wasted all our money', that's that bubble that sits up there" (a transition support staff, TO2, lines 172-174; 183-185; 417-422).

The above discussions present the various human relational issues during the communication activities between the project stakeholder groups, explaining why communications were difficult between different groups. When these intergroup issues grew to an extent, conflicts occurred. The next sub section will discuss the stakeholder conflicts that actually occurred during the SS project.

4.4.1.4. Stakeholder Conflicts

Stakeholder conflicts were coded as a fourth stakeholder relational inhibitor, which was a major factor that resulted in slowing down the SS project. Various conflicts between the project stakeholder groups emerged from the data. Episodes of the most significant stakeholder conflicts will be discussed, by giving the details of the context within which they were enacted. These episodes are of particular interest to the research, as it provides a rich picture of power relations and interplays that had significant impacts on the SS project.

Episode 1: Stakeholder conflicts involving coercion and overt resistance – the third Project Director, the Chief Information Officer (CIO), the senior executives and the Council

This episode involves the overt resistance by the third Project Director to the perceived coercion of the CIO, the senior executives and the Council. This episode occurred when there was considerable anxiety and concern at the level of the VC and the senior executives of AsiaPac University about the high cost and lack of progress with the SS project. A difficult go-live deadline was then demanded from the top. The deadline

demand was perceived by most in the SS project team as unrealistic. A project manager said:

“There was a tipping point in January where there was a risk that [the third Project Director] would either choose to work or be pushed as the next bad egg – ‘you aren’t going to deliver either’. And the benefit or fortunate thing, there was a number of people confronted the way which was the problem has been tackled, myself and couple of others included, and said this needs to be more adult problems solving, not kids with baseball bats in the school yard, so that and let’s hope some good plain thinking by people led to a shift in behaviour still finding target blame, people got around the table and worked it out. (...) After VC and Council got upset in December, the VC chose to mandate a set of delivery dates, as if you could somehow make that happen. King Canute. The sad thing about that was that he had a view that would somehow work by imposing new ridiculous deadlines that had no substance behind them, while paying [the third Project Director] to tell them in February what those dates should be, so you end up with a circumstance where somebody seeks to impose an improvement by saying ‘this is what’s going to be’, and maybe a bit of table thumping or something” (a project middle manager, PM1, lines 295-300; 310-317).

The University CIO at the time, after being subject to very heavy pressure by the VC and his executive team, demanded of the newly appointed Project Director, that the project go live by September 2013. The third Project Director, however, perceived the CIO acting as a coercive agent whom the VC and the Council had influence or authority on:

“At the beginning of January, when I had, the VC wasn’t saying to me, he was saying it to [the DVC Education], and [the DVC] was quite panic about it. He really didn’t understand. But [the CIO] took that straightaway and he accepted the coercion because he wanted to please the superior” (PL5, second interview, lines 266-269).

A project manager also described how the CIO was acting as a coercive agent in trying to realise the difficult go-live deadline:

“I think [the CIO] was under the same kind of scrutiny. We had a difficult time in January this year (2013), because he (the CIO) was given, someone out there, may be the VC, he was given a ‘to get this thing live by April (later changed to by September)’. That’s what he did, he walked in and said ‘we’re going to do this’, and that caused [the third Project Director] to promptly walk out, like, to say ‘well, I’m not having anything to do with this’. (...) [The CIO’s] interview style was no matter what you said to him or to put on the board to continually repeat, (he would say) ‘so it’s possible, isn’t it? So you say it is possible then?’ So he didn’t want to hear ‘no’ answer and I think that’s what he was getting from above which was what they probably did to everybody else – ‘Don’t you come back with no’ (laughter)” (a project middle manager, PM4, lines 225-231; 571-574).

The third Project Director, however, was a professional and highly experienced project manager. After her estimate of the project state, she thought that this new deadline was impossible to meet and highly unreasonable. She refused to accept the deadline and she said:

“They wanted me to do that from the beginning in January while I was estimating for the rest of the project. So my resistance was ‘back off, let me finish this estimations exercise. When I’ve done that and I’ve got that to you, then, I will start to focus on quantifying and qualifying what we can do in a short period of time’. (...) And that was that I put my job on the line and said ‘if you guys are going to continue to work this way, I am not going to be another one of your victims’, because there was a lot of that coercion, what I believe is coercion in the past in the project” (project leader PL5, second interview, lines 255-258; 272-274).

When the researcher continued to ask whether she felt threatened in her job, her answer was:

“Absolutely, absolutely, especially in January when I stood up and said ‘I am not going to do that interim thing’. This is to [the CIO]. He was very threatening. That’s when I had a three month review with him and he told me that I would be demoted. (Laughter) (...) Actually it came to a head on the Wednesday when [the CIO] told me that I would do this, this and this, and I said ‘I’m not doing that. I’m going home now. Unless something changes, I won’t be coming back, okay, because this is untenable situation. I am not going to do (professional) suicide’. So I stood up to that. I went home and cried a lot. I made my decision to come down here and put so much energy into it, and I know that I was right morally and practically (project leader PL5, second interview, lines 303-305; 309-315).

It is obvious that the third Project Director regarded the action of the CIO as coercion. She overtly resisted the CIO’s demands even though she faced the threats of being demoted. The third Project Director was not easily persuaded by the CIO and the senior executives in AsiaPac University because she did not feel the CIO and the senior executives shared her identity as a professional IT project manager, and further, she did not feel they had the legitimate right to demand such an unrealistic and unreasonable deadline. Indeed later in the third Project Director’s interview she descried the CIO as someone with very little experience of business transformation projects like the SS project. She said:

“You’ve got the people on the top, the likes of [the DVC Education], [the COO], even the VC and all those people, they didn’t even have a clue, they just said ‘go forth and make this happen’, so ‘oh, I’ve got to get the project team so the only place we know where projects run is either in the property area, or the other area we know is IT, so oh this is an IT project’. [The CIO] wouldn’t know any difference because I think most of his life is working in the University and only seeing projects here. (...) When [the second Project Director] left, there was nobody running the programme, and that’s when [the CIO], he was freed from his obligation as the CIO and given the programme, but in the role of business transformation manager. The key issue there was [the CIO] had no idea what that role meant, and in the three months that I worked beside him, he didn’t do

anything in that space because he didn't really understand, he wasn't a business person, he was a technical person. That was an example of senior management not really understanding what it was about. If he had been able to embrace what that really meant, it would have worked" (project leader PL5, second interview, lines 192-197; 221-228).

It can be inferred that the third Project Director did not view the CIO as sharing her identity as a professional IT project manager, and therefore tended to view him as not having legitimate authority and power. Further, the third Project Director's identity as a highly professional IT project manager was more important to her than her current job as the new SS Project Director. She said:

"From my perspective I was not prepared to be coerced, bullied, persuaded, anything, because I'm here on my professional capability. I don't need this job if it's just a hiding to nowhere" (project leader PL5, second interview, lines 299-301).

The third Project Director's resistance to the unrealistic deadline was supported by the SS project team, such as the following comment made by a project manager:

"Why would you put your head on chopping board for people who don't trust you anyway to do the job, and that's the other thing that I think over the years there is a general lack of trust between management and staff, management and managers. (...) I think, for her, she is struggling between... like to use words 'I'm not going to be anyone's puppet. They're expecting me to sit here while they all run the show. That's not going to happen'" (a project middle manager, PM4, lines 240-242; 413-414).

The third Project Director being pushed to accept a difficult deadline was also interpreted by other project staff as a coercive act:

"The second bullying was I guess a group of senior people saying to [the third Project Director], 'you spoke up and that wasn't rehearsed. Get back in your box,

and how about we bang you around the head and see what you will do with that” (a project middle manager, PM1, lines 322-325).

A power struggle then occurred; the third Project Director had to walk out of her position to resist the unachievable demand that was made by the senior management of AsiaPac University. During this period of no directorship, the project was significantly slowed down. The upshot was that the CIO had to leave the university and the third Project Director moved back to her position and gained control of resources such as additional budget, time and human resources. Section 4.4.3.1 will discuss further how this power struggle was approached and how the third Project Director managed to move the project forward.

Episode 2: Stakeholder conflicts – the Dean of the Research Division, his administrative staff in the Research Division, the Business Analyst (BA) seconded from the Research Division to work in the SS project, and the SS project team as a whole

As discussed in Section 4.4.1.3, the ineffective communication between the SS project and the university business staff group was largely due to the ex-business project staff making decisions in the project without adequately consulting with the current business users. The ex-business project staff controlling the making decision channel led to not only the lack of business-project communication, but also sometimes the tension, and even conflicts, between the two stakeholder groups. This episode presents one of the conflicts that actually occurred between the project and the business due to this issue. Specifically, it was perceived that the BA who came from the University Research Division to work in the SS project made decisions during the business process elicitation process. This was due to not only her familiarity with the Research Division business processes but also the difficulty that she perceived in getting the administrative staff in the Research Division to engage and support her job in the SS project. The BA seconded from the Research Division said:

“When I first started, I was still very attached to the business area because only I just left. So I would go to them and said ‘I need this information, what’s on this,

blah, blah, blah’, and I would either get nothing back or I would get 5% of what I asked for. I was getting more and more frustrated. I was trying to move things forward on my own, and I would get nothing from the people who supposed to (provide me information)” ((ex-Research-Division) Business Analyst BA2, lines 700-704).

When the gap in information was acknowledged, the Research Division was unhappy about the new student system not being able to support their desired business processes because the business requirement elicitation was based on dated information, whereas the SS project team was annoyed by the constant changes made to the Research Division’s business processes. A project manager made a negative comment on the changes of the business processes during the SS project and identified the problems that those changes would cause:

“The higher degree research area, so [the Research Division], they are undergoing a lot of changing rules, that sort of thing. If we’ve already agree to the business processes and then you go through change requests, we need to then do an impact assessment, what means from the business solution point of view, and then downstream what does it mean for integration, and deliverables and that sort of thing, has to go through approval process. Ideally, we could freeze everything for 12 months (laughter), but it’s kind of unrealistic to ask that at such a blanket level. (...) The core of everything we do here is ‘when do we offer things’, ‘what do we offer’, and if they change, that change can lead to other things like there might be a new graduation certificate needed. [The student system] is designed so you set up a course structure, so right from start you say to your student ‘here is what you have to do to complete your degree’, and then during the time they just enrol in those units with those structures. If those things continue to change all the time, end up with students in different years. If you’ve got slightly different structures, it can get quite complicated to administer. If we’ve already set up the structure based on what we understand for 2014 but changes in, say October this year, we have to go back and change

all those structures again, we need to do that, get it revalidated” (a project middle manager, PM4, lines 19-26; 50-58)

Moreover, the gap in the information was also a result of the leadership change in the Research Division. The knowledge of business processes that the BA had was based on the situation prior to the old management team of the Research Division leaving. However, when the new Dean and his management team arrived, this new management team decided to review the business processes in the Research Division and make fundamental changes, as the BA described:

“So [the former Dean of the Research Division] moved forward, [the new Dean] goes to be the Dean at the same time. They had a new executive officer in there, and they also got a new Director for research services. So what happened then is three of them got together and said ‘we are going to change everything’, (laughter) which meant that all the information that I’ve had and all the work that I’ve done is basically all sort of... It’s been driven from the office of the Dean. He is looking at the rules, the procedures, the processes, and saying ‘I want to review everything that we’re doing and change it’. Potentially that would pull [SS] back. When I heard about this, I sort of tried to say ‘we need to be careful, because you are actually fundamentally changing things that you do and it’s a bit late now to be doing that’. (...) So since I think [the former Dean] left, it’s basically when he left, and we had a whole new set of lead roles, they decided they wanted to review all the business processes” ((ex-Research-Division) Business Analyst BA2, lines 108-121; 127-128).

The BA then perceived the tension between herself and the whole Research Division, suggesting that:

“I’m in a weird position and I probably should have said this upfront, I actually resigned from [the Research Division] this morning (laughter), because of the drama and issues and the change and that, because they are changing everything that they do. That means all the knowledge I have doesn’t matter anymore, and the impression I get is that they want to dictate it, and not

actually (support it). So I was under [the Research Division] this morning. I got four weeks and then I started back as a full time [SS], and not working for [the Research Division], because I felt it was me versus them” ((ex-Research-Division) Business Analyst BA2, lines 641-650).

On the other side of the tension, the Dean of the Research Division, from his perspective, argued that the gap in information was due to the BA’s deliberate act of not consulting with people in the Research Division:

“The only explanation I can kind of give is that a particular individual or two was pulled out of [the Research Division] about 18 months ago, and that person then kept providing advice, but at that time she had fallen out with the people back in the [Research Division], and refused to have discussions with them, and nobody seemed to notice this at the project design end, and I just found that so bizarre as well. So you might find this ironic that we had person dependents built right into the design. Nobody here actually quite knew what was going. Nobody came and said ‘can we just check with you, blah, blah, blah’. So when I took over as Dean of [the Research Division], I kind of got a bit worried that who was the communicating person, who was telling whom about what was required, and I finally dragged that person into my office and said ‘could you explain to me what is this you are telling people’, and she was difficult. So as soon as I knew I had a difficult person, that took me 5 minutes to work out, I knew that we were giving the wrong messages through. So then I called her to a meeting down at the [Research Division] and I noticed she and all the people that knew how the system works were at cross purposes. Every time when she said something, I said ‘no, that’s not the way we do it’. So it’s not only that the system wasn’t being built about how we did it, but it was built in terms of something that might have happened in the imagination of someone some years earlier. So it was just a very bad bit of project management communications. These are the terms you can use” (a senior management member, SM2, lines 104-120).

Further, the Dean of the Research Division continued to comment that the BA did not consult with them because she did not have a good relationship with her old

colleagues and tended to use the power of her position in the SS project to control the processes that her old colleagues were working in. The Dean of the Research Division said:

“The big warning sign was that when I said to her, ‘so you are now in a very significant position. You are translating some of the big operational needs from the [Research Division] into the [SS] project. How frequently you check with the people who are at the operational end of it about whether you are delivering the specification they need?’ That was kind of my single question, and she said ‘I don’t get on very well with them’. So when I asked people down what was happening down at the [Research Division] level, and they said, well, this person now thought she was in the position of power and she hadn’t been very popular when she had been with her peers, but she now felt that she had been, as it was, an in-and-out situation where she could start to define the operations in the [Research Division] because she could use the power of the technology to create specifications which would enforce people who she didn’t get along with to finally jump to her tune. No one said that quite that eloquently, that was what the message was to me. And I thought ‘wuh, what sort of a bloody problem we’ve created here’, so then I had them in the same room for a while and I noticed that every time people in the [Research Division] said ‘what we want to do is blah, blah, blah’, she would interrupt them and said ‘no, no, no, that’s not what we’re doing’, and they would say ‘but that’s what we want’, and she said ‘I don’t care what you want, this is what’s happening’. So it was actually the micro power where an individual thought they could harness the power of the technology and the power of creating as it were the system from that technology to get back at those she didn’t feel were her friends” (a senior management member, SM2, lines 322-339).

It is interesting that the Dean of the Research Division perceived and interpreted this issue in the way that the BA shared the identity with IT focused people who the Dean did not identify with. In addition, the Dean tried to defend his group identity as the

business user (more specifically a senior manager of the business stakeholder group) against the group of IT focused people in the SS project.

“Maybe she shares an identity with some of the norms and values that the IT people have, but she was missing out on what the purpose of actually the system is. I don’t want to go too far because, you know, now I’m hypothesising, but I felt she had deliberately cut herself off from being in a consultative relationship to make sure that the system was providing the right capacity for those who were having to administrator postgraduates. And it’s kind of a bit of test if you think about it, so who is going to run the system? And she seemed very smug about the fact that she was going to control the work of these people. So if you want to, I’m quite happy for you to see this in terms of me sitting there thinking ‘well, this is my decision to make as the manager, it’s not for some clown to try to get in this interface between me and the team with some techniques and shift the power in a different direction” (a senior management member, SM2, lines 343-352).

The above discussions therefore illustrate that the stakeholder conflicts appeared to be a result of not sharing an identity, and as such, disagreements could not easily be resolved even through a persuasive or collective way. Section 4.4.3 will further discuss how these stakeholder conflicts were managed so that the SS project was moved forward.

4.4.2. Category 2: Stakeholder Relational Improvements

The second category associated with the sub-theme *Stakeholder Relationships* is the improvements in the SS project related to stakeholder relationships. These improvements were reflected in various communications between project stakeholder groups. Table 4.5 below describes how this category has been developed, and indicates the axial code and example of open codes that contributed to it.

Examples of Open Codes	→ Axial Code	→ Category
Sponsorship improvement, better senior engagement, better senior management support, better business engagement, better business-project communication, better ITD-project relationship, less user resistance, increased user acceptance	Better stakeholder communications	Stakeholder Relational Improvements

Table 4.5 Analytical development of category ‘Stakeholder Relational Improvements’

4.4.2.1. Better Stakeholder Communications

A major enabler of the SS project was the improvement of stakeholder relationships that was reflected in their communications. The stakeholder communications started to improve during the second Project Director phase and became considerably more effective after the third Project Director took charge of the project.

In 2013, the third Project Director’s estimate indicated that the project team would continue to fail to meet the designated go-live date. In addition, the fourth external review of the project revealed various problems with the project. Therefore, the senior management of AsiaPac University was now getting worried and recognised the need of their engagement.

The first thing the senior management did, which improved the stakeholder communications, was the sponsorship change from the University Chief Operating Officer (COO) to the business owner – the Deputy Vice Chancellor (DVC) who took charge of the business areas for education. The DVC said:

“Where is the ownership lie, it lay firstly probably, this has been the big shift at the level of the business owner, that was [the COO], and increasingly [the COO] and myself, this is psychological formation, so when we realised things needed to be taken more strategically, we raised that at senior executive and with the VC, and the VC in 2012 restarted to own the issue. (...) We began to become aware at a senior level of the need to really get some grip on it, and secondly because it involves the student administration and student experience more broadly, it became obvious that I was probably the better business owner rather

than the Chief Operating Officer” (a senior management member, SM3, lines 12-15; 172-175).

As the VC restarted to own the SS project issue, the senior executives, under considerable pressure, started to engage heavily and get control of the SS project, trying to make sure the failure of meeting project deadline would not repeat. The COO described the pressure that he was under with respect to the SS project:

“I stayed pretty heavily involved, and [the Vice Chancellor] made it clear in Council, and certainly made it very clear to me that the success of [SS] going forward at that point was very much going to determine my success as well. So I said to one of my key KPIs (Key Performance Indicators) even though I’m not the business partner for it to make damn sure it succeeds and I’m linked through IT and through the Steering Committee, still other bits and pieces. I have a lot of skin in the game in terms of making sure it succeeds” (a senior management member, SM4, lines 131-137).

The COO also indicated the pressure that the DVC had, especially after the project sponsorship was transferred, onto the DVC’s shoulders:

“(The DVC Education), I think he is a bit resentful that he ended up with picking up a project which is in state of distress, which we have in the same way. He could understand the need. He could understand he hadn’t been engaging. He recognised that he had to be the business sponsor of the project, it wasn’t a technical IT project, and it had to sit with him. He, I think, was very upset that. (...) Finally it is (a business transformation project). I think up until the start of this year it was very much an IT project, and now people start to understand ‘oh my god it’s going to transform the life cycle, the students...’ It’s all about the process, the way we do business, so it’s going to be very different” (a senior management member, SM4, lines 340-343; 417-420).

The above statements imply that, although reluctantly, the DVC and the COO recognised the need to increase their engagement with the SS project. A project leader

also suggested that the increased senior engagement and support was a positive result of the pressure on the DVC:

“After [the CIO] left, the decision was taken that really the Sponsor of this is the owner of the business area which is the student area, so that it was passed across to [the DVC Education]. Now in these four walls, I think he felt he was handled a bit of a hot hospital pass, that he was worried, you know, feeling that he’s been handling something that wasn’t moving particularly well, and so he has become very very closely engaged with it, and with [the third Project Director], and has put a lot of trust in [the third Project Director] to get this through” (a project leader, PL1, lines 387-392).

The sponsorship change was accompanied by the shift in treating the SS project as only a system replacement project to an organisation-wide business transformation project. It is apparent that this shift was a big facilitator for the SS project. It was interpreted positively, as it led to better senior engagement and support, by more project stakeholders:

“I mean that probably comes around to a point what we probably haven’t really covered is that, to me, the biggest problem that we had over all of the things that went on was that this was an IT project, it was not a business project, and they fixed it, they had made the report to [the DVC Education] as a business project, that is good. Where this whole issue about going back and forward between the business, this, that and the other, it wouldn’t have been an issue if it was a business project. And even now it’s not business enough for my liking, but it’s a lot better because there is [the DVC Education] at the top that can balance the needs of the real business and the project that reports to him and get something” (a project leader, PL2, lines 682-689).

“I think it’s changing now. I think it’s because she (the third Project Director) now reports directly to [the DVC Education], and I think it’s under a level where she goes to his meetings. A lot of this information and the sort of situations impact [the Student Services Centre], who also in [the DVC’s] vision, so there’s a

lot of interaction between whereas it was before under [the COO] as an [IT Division] project” (a Business Analyst, BA2, lines 207-212).

As the former and current Project Sponsors involved heavily within the SS project, other members of the university senior management team (such as Deans of Faculties) then felt more confident in the realisation of the SS project and started to take the ownership of the implementation. The DVC said:

“They (senior management members) were very suspicious of what was going on and now they are actually quite confident everything is on track. Senior management team (SMT) of Deans, I think, initially were asking difficult questions, they were worried, and now realised, if you like, their ownership of the local implementation, so it’s no longer the issue that gets, I get really pinned on in SMT, it’s relatively straightforward” (a senior management member, SM3, lines 178-182).

As a result of the increased senior management engagement and support, the university staff started to obtain more direction and indication of the change that the SS project was going to cause. Consequently, the university staff also became more engaged with the project. A project worker noted that the third Project Director made it possible for the senior management to lead the change. This project worker said:

“Everybody knew about [SS] unless they only arrived yesterday, and nobody believed it was ever going to actually finish, this is 18 months ago, and she’s (the third Project Director) championed the project to get from that point now to where everybody knows now it’s really happening and when it’s happening. And that’s required to have people like [the DVC] and other executives going out and saying ‘yes, this is happening’, and that was never happening before. So the Sponsors were kind of reluctantly giving out the money at that time but not doing anything themselves to promote the project, and she’s fixed the problem” (TW4, lines 195-201).

The above statement strongly suggests that there was a big improvement of senior management engagement and support in the third Project Director phase. It can also be inferred from this statement that the increased senior support tended to give the business a clearer direction of the change that would be generated by the SS project. Therefore, a senior authority leading the change was seen as a facilitator for business engagement with the project. The DVC pointed out their contribution in the business engagement improvement:

“That was a big shift that we made. We made the [SS] project not a project, it’s a programme of institutional change, and built the business into the governance. So there was not the room for this mutual incomprehension. Actually everyone is in the mix together. And if you look at the progress we’ve made since October, it’s now uniformly recognised that the business is engaged fully across the institution” (a senior management member, SM3, lines 112-116).

With the senior support, the university staff recognised the necessity of their engagement and felt more empowered to engage and contribute in the project process, as suggested by a number of business stakeholders:

“Before it just felt like [SS] was something that was just being placed in [it’s located] building, whereas now all of a sudden things changed. I think when [the third Project Director] came in, everyone was brought in. This was not something, not some figment of our imagination. It wasn’t something away in the distance. It was actually in our lap. I think that was the big change for me. It really came into, you know, I had to allow for the [SS] stuff in my role” (BS5, lines 36-41).

“I think I am a bit of a peon (laughter), but I decided this year I really need to be doing that. It’s about the business, and how the business goes live. It’s not about the project, you know, the term of adoption, how the business adopts the new system” (a business administrative manager, BS4, lines 409-411).

“I’d say at this point in time now, it’s actually finally locking in a working move. (...) So last year we actually finally got recognition that we actually had to put some money in the business for that to actually happen. So we could actually, people could free our time to engage in it. That certainly made it a bit different too” (a business administrative manager, BS1, lines 153; 400-402).

“You can look at that as ‘we will make this happen, if we need to take the support model over, if we need to get people to do the XYZ, then we will do it’. It’s also that preparedness for ‘okay, if IT falls over or they drop the ball or if the project fumbles on this, do we have mechanisms in place for us to pick up?’ So I think [the Student Services Centre] is changing their position in the game. It’s no longer ‘we are the client and you will deliver this’. It’s really the ‘we really need to take carriage of this because you guys might not be fully across it, and it is coming and we need to... we basically need to manage the fallout’. So I think we are not as meek as we used to be and expectations have been dropped, and that sort of changed” (a transition support staff, TO1, lines 580-588).

The improvement of the business engagement largely promoted the SS project. The statements below are positive comments made by the SS project staff on the increased business engagement.

“I think the people who have more faith that the project will deliver something keen to be involved in a working group or focus group, so there is a higher level of engagement with the project, so they perhaps have a better understanding of what it’s at and progress that has been made, whereas there tended to be people with a looser connection to [SS] project” (a training agent, TT1, lines 241-244).

“In many ways there is a lot of people from the business have to be engaged both in developing ideas, making decisions, and then getting ready to implement it, so that whole readiness work, it’s now much stronger than it was” (a project middle manager, PM1, lines 419-421).

“Now their relationship with [the Student Services Centre] is very good because the key person, I’m sure you’ve interviewed, [a business leader] appears to be on this as well with massive corporate knowledge” (a senior management member, SM5, lines 439-441).

Interestingly, a transition support staff noted the transformation from covert user resistance (the attitude of keeping away from the SS project) to overt user resistance (the behaviour of making negative comments). She perceived this transformation positively because it implied at least the increase of engagement and attention paid by these negative users. This transition support staff said:

“You can tell when you attend the meetings who are the people who oppose because they come with all the ‘but what about this, what about that, that won’t work’, so they’ve really thought the process through, but in that itself is good because it means they are already accepting it’s going to happen and now they are looking for problems, which is good, because we need to know the problems now, we’ve got time now to look at them before go-lives” (a transition support staff, TO2, lines 176-180).

The transition support staff continued to identify that the SS project now started to have power that made the university staff engage because of its priority and urgency.

“The project probably knows that, so they’ve got a position of power in that they’re almost at the end of their cycle, ‘you guys are going to make it work’. So now the shift is suddenly the business is being told to do all these things that we were looking into the project to support us on” (a transition support staff, TO2, lines 463-466).

The above statements made by this transition support staff are interesting because they suggest that user negative sentiments could sometimes be a positive factor for a project. It is also interesting to find that power might shift between change agents and change recipients at different times during a project.

Since the project was now being led in the right direction with increased engagement and support from both the senior management and business users, the resistance and negative voices started to decrease. More and more business users started to accept the fact that the new system was going to be implemented and this would affect their day-to-day work. The quotes below provide evidence of the user resistance decrease:

“(When being asked about user resistance), it’s interesting. It’s so much better than what we got now. I think there has always been resistance to it as it’s fundamentally new. But I don’t think that will last very long. I think people will just relatively accept that it is a fundamentally better process than what we got which was a mainly paper based and 1985 system which was just horrendous” (a senior management member, SM4, lines 422-425).

“I think there would be an acceptance that it’s coming. It’s been coming for a long time. So I think the resistance won’t be around whether they want to use it, they know they have to use it” (TM2, lines 482-484).

Overall, the above discussion focuses on the stakeholder relational improvements reflected in the communication activities, which were seen as facilitators for the SS project. The next section will discuss how such progress was made and what specific strategies were used to achieve these improvements.

4.4.3. Category 3: Stakeholder Relational Strategies

This category encompasses two distinct forms of power strategies that were used to resolve the stakeholder relational issues during the SS project (the issues were discussed in Section 4.4.1). These power strategies included challenging organisational hierarchy and stakeholder persuasion strategies. Table 4.6 below provides evidence of the analytical development of this significant category. This table also provides an indication of the associated axial codes and examples of open codes from which evidence of the category was obtained.

Examples of Open Codes	→ Axial Codes →	→ Category
Project whole story reporting to upper management, project team support for project leader resistance	Challenging organisational hierarchy	Stakeholder Relational Strategies
Ex-business project leader cultural influence, strategy of business champions persuading business, strategy of student champions persuading students, strategy of academic champion, strategy of faculty champion, project-business persuasion with communication skill, project-business persuasion with sharing identity, project-business persuasion with personality, project-business persuasion with respect	Stakeholder persuasion strategies	

Table 4.6 Analytical development of category ‘Stakeholder Relational Strategies’

4.4.3.1. Challenging Organisational Hierarchy

As discussed in Section 4.3.3, the acceptance of a superior’s authority within the SS project team was found to be a factor for facilitating the project. However, it has been found that, outside the project team, over-submission to a superior’s authority and the organisational hierarchy could have negative impact on the project. An important finding, shown in the episode below, is that challenging organisational hierarchy could be a facilitator for the project success. This episode illustrates how the third Project Director managed the stakeholder conflict issue that was discussed in the first episode of Section 4.4.1.4.

Episode 1: Challenging organisational hierarchy – the third Project Director, the CIO, the senior executives and the Council

As discussed in the first ‘stakeholder conflicts’ episode in Section 4.4.1.4, a power struggle occurred when the CIO, under the pressure from the VC, brought considerable pressure to bear on the third Project Director, who was newly on board, that she should agree and meet a difficult project go-live deadline, and the third Project Director refused to commit to it. A big issue that inhibited the SS project was found to be that the previous project leaders who were mostly seconded from the university

business areas were submissive to the organisational hierarchy and thus tended to convey better-than-real messages to the top management. A change consultant in the SS project said:

“Lots of people associated with the project were still employees or permanent contractors or people that associated with the corporate hierarchy here. Therefore, when they were told how high to jump, they would find it difficult not to jump, rather than saying ‘hand on, we’re adults, we need to have a dialogue about this’. They would become submissive in the hierarchical sense. Eagerly they would report what they thought was appropriate and that was favourable even if things weren’t as favourable, because that’s what the client wants to hear, what the audience wants to hear’, so you tell them a favourable view. So then people were part of a hierarchic position and as such they wanted to convey the news that appeared to be wanted to be heard. (...) So if you have project people who are in many ways university employees and therefore subordinate to a hierarchy, they are not able to say ‘sorry, do you realise you’re pissing money against wall’ or declining to make a decision. (...) So people in the university who were here I think were part of a subordinate game, ‘oh, that’s what goes on’ as opposed to ‘no, we need to step outside that game and say let’s change the rules’” (PM1, lines 130-139; 185-187; 279-281).

The change consultant continued to point out the differences between university-sourced project staff and externally recruited project staff with regard to delivering messages upward. He suggested that they tended to submit to different hierarchies; organisational hierarchy and project hierarchy.

“I think if they come from this university, they’re immediately subordinate to the traditional corporate hierarchy here rather than the project hierarchy, so they don’t know how to counter or challenge, understandably, for all organisational power. If you come from other universities, as a contractor, you will be more comfortable about that. If you come from a vendor or service provider, a business like ours, then you assume you have to confront and in some ways

challenge the negotiated order or the world will be as it was” (PM1, lines 454-459).

Quickly the third Project Director realised that the VC and the Council were not aware of the whole picture of the project problems. In order to convince the top management that the deadline they were insisting was unrealistic due to the status of the project, the third Project Director decided to challenge the organisational hierarchy and present the whole story to the senior management, including the VC and the Council. The third Project Director described her draining experience of getting the attention of the Steering Committee and finding out that they were not aware of the whole story:

“I put together papers and presented to Steer-Co, so the Steering Committee group on the 28th, and even that was a joke, because you’d think that me being here and [SS] being in the situation the way it is, there would be nothing more important than eight or ten members being available to attend the Steering Committee meeting. It was put off because they weren’t available until I chucked a hissy fit ‘are you serious people?’ and suddenly there is then another meeting constituted. I gave them my report. I was told ‘thank you very much’. I received a lot of support from a lot of members. They indicated, and I don’t know whether this is true or not because this was my first session with them, that they weren’t aware of all of the stories and all of the things that I was saying, so I suspect it was covered up or the whole truth wasn’t being told” (project leader PL5, lines 344-353).

Soon later, the third Project Director had to be the person who presented the bad news in front of the Council members, as she described:

“I suspect it was covered up or the whole truth wasn’t being told. And I was told then that my report would go to the Council but I wouldn’t be required at the Council to present it, and that made me nervous because I thought you guys had been a filter or watered down the story, and then they changed their mind and decided for whatever reason that I had to actually go and do all the presenting,

and I thought ‘well, thanks for dumping me within that last minute’, but it was a good thing. So we’ve had that today, so I’m totally emotionally drained after that. I ought to have twenty minutes to present but I was there for an hour and half presenting and being grilled and being, not that they were angry with me, but they were livid with the situation” (project leader, PL5, lines 353-360).

It is apparent that the third Project Director’s presentation of the whole story caused big shock waves in the University Council. Despite an emotionally draining experience, the third Project Director found it a positive move for the SS project to make the top management aware of the situation. The third Project Director’s whole-story-telling approach was also perceived as a positive factor for the project progress by other project team members, said by the change consultant:

“Certainly I think the Vice Chancellor in Council had gotten tired of being told one more time ‘we can’t deliver to the deadlines’. They’ve reached the point of fed up. The curiosity about that was [the third Project Director] was already over a month into the game, and [the third Project Director] was changing the game. Part of the dilemma that those two incidences coincided with was a third, and that was still fuzzy-ing the reporting going on, and a lot of practice was done to go to Council and told story that was straight. The trouble is Council then began asking questions and you can’t practise those, and [the third Project Director] chose to answer them directly. (...) If January turned out differently, [the third Project Director] would have gone and be back to starting the game again” (a project middle manager, PM1, lines 286-291; 397-398).

Not only was it necessary for telling the whole story to the top management as perceived by the change consultant, but also he saw that this approach was successful because of the third Project Director’s professional experience and project management expertise, as he suggested:

“The Programme Director now, [the third Project Director], comes from big projects. She comes from big projects that are required to deliver so she is comfortable with the disciplines around project management. She has told

enough of the truth to both the Executive and Council. The fudging or the fuzzy-ing of performance is no longer avail” (a project middle manager, PM1, lines 218-221).

Further, the previous project leaders also supported the third Project Director’s whole-story-telling approach and they said:

“I think [the third Project Director] will (realise the project go-live) though, because she is very very good at building arguments, persuading people, just from the little I’ve seen. I wouldn’t be surprised if we don’t run out of money and she gets there and she says ‘I have an argument as to why we should do this and it’s going to cost this much more but because there is only that much to go, so I can give you this much more certainty we would go’. But you have to have that, you have to have somebody who’s got that mind and that ability to put that forward, to actually do it. It’s the message we’ve got for years: ‘don’t you dare come back for another cent’” (a project leader, PL2, lines 450-456).

“She (the third Project Director) bravely, bravely, with ‘no, I can’t deliver to that with these resources and so on’, so again, I take my hat off to [the third Project Director]. She’s done everything I think by the book and correctly to her cost and time in terms of people’s view about her but she’s been proved right” (a project leader, PL1, lines 507-509).

With the third Project Director’s firm approach and her expertise and experience in managing big IT projects, the University Council chose to agree on the third Project Director’s estimate of the timeline and budget. The senior executives of AsiaPac University then started to rely on the third Project Director for the success of the SS project. A senior management member said:

“There is a very strong respect from the two [Project Sponsors] of [the third Project Director’s] capability, and there is very clear understanding from them that she holds a key to pulling this off. And there has been at least one other occasion where [the third Project Director] very basically had to advise to two

[Project Sponsors] by saying that ‘you’ve got to look after this, you’ve got to deal with this matter, this is my recommendation how you deal with it’, because if you don’t, you are under the risk of [the third Project Director] walking. If [the third Project Director] walks, this goes down the gurgler, and that has been a clear understand. They know that, they know that all to full well, so it is a very healthy respect that they have of [the third Project Director’s] capability as a Project Director” (a senior management member, SM5, lines 178-186).

The University CIO later left the university after the power struggle between him and the third Project Director. A senior management member described the situation:

“When [the third Project Director] came on board, [the CIO] was still here, and we had [the third Project Director] reporting to [the CIO] as the Head of IT, and it didn’t work at all. [The third Project Director] and [the CIO] went head to head, and it got down to ‘choose one of us’: ‘choose me or choose her’, and in the end, we chose [the third Project Director], but that conversation on who we take, [the VC] was very difficult as [the CIO] had been here for almost 17 or 18 years, senior CIO within the university sectors, he had a lot of street cred, but [the third Project Director] said she was not going to stay if [the CIO] stayed in that role, and [the CIO] said he was not going to stay in that role if [the third Project Director] stayed, so we had to choose, and we chose [the third Project Director], we chose her because the project was more important than individual” (a senior management member, SM4, lines 213-221).

As can be seen from the above statement, the third Project Director reported to the CIO and in that sense the CIO had control of resources that were important to the third Project Director, indeed both human and material (e.g. her salary), but the CIO could not exert power over her. When the power struggle occurred, the third Project Director’s professional experience and expertise made her resistance succeed. The organisational hierarchy, in this context, was challenged by an externally recruited, highly experienced Project Director. This episode indicates that challenging organisational hierarchy might not necessarily be a negative project factor; when necessary, it could be a positive influence on the project progress.

4.4.3.2. Stakeholder Persuasion Strategies

A second form of strategy that was used in managing the stakeholder relational issues in the SS project was various strategies of persuasion. Most persuasion strategies were found out to be enabled by influence driven from a shared social identity. However, there were also persuasion strategies driven from other factors such as expertise, communication tactics, and personality traits. These persuasion strategies will be reflected in the following three episodes.

Episode 1: Stakeholder persuasion strategy – the first Project Director and the business stakeholders

This episode shows the persuasion strategy concerning the first Project Director and the business stakeholders. The first Project Director was a previous senior administrative manager in AsiaPac University before moving into the project team. He was influential among other administrators and understood various aspects of business processes in the university. Despite lacking project management background, this senior administrative manager was recruited as the first Project Director of the SS project. He indicated that his former administrative experience and his influence in the university gave him an advantage to manage the business-project relationship. He said:

“The relationship that I had has been part of the project administration was much more around trying to manage the customer relationship, if you like, so my old position was as a customer, and now I’m trying to manage a project in relation to a customer. And the dynamic is a little bit different with that because I am aware of all the things that are difficult for the customers in terms of their engagement with the project and all the rest of it. I am aware of the deadlines and everything that’s getting pushed hard through the project side. And there is a conflict between the two and because you are aware of both things, you are in the position where you can try and negotiate the outcome a little bit more eloquently than if you were just on either side” (project leader PL1, second interview, lines 100-108).

A particular instance where the first Project Director was able to persuade the business stakeholders was when he worked closely on writing up business requirements with the administrators in various business areas for the project. It was a period of time when the project team was working on the business requirements elicitation and analysis which required the business stakeholders to assist. The particular timing of the business requirement elicitation and analysis was awkward because it was taking place in the later part of the year when there was a height of academic activities (e.g. all second semester exams, graduations, and certification). In this situation, however, the first Project Director managed to gain a lot of support from his previous subordinates and peers for his efforts in engaging the business stakeholders into project activities. The first Project Director described:

“I was able to ask for and plead with and all the rest, (for) people from the business to come into those workshops which were often full day or at least half a day and maybe two topics on the full day with the same group day, and we bribed them with food and all the rest and that they would come along, but I think if that had come cold from someone not within the university and not known within the university, it might not have been as successful as it was” (project leader PL1, second interview, lines 157-161).

It is implied that he saw himself categorised as a ‘business person’, at least in the context of asking other business stakeholders to give up their time to help the SS project. It can be argued, as he did, that the relevant psychological category implicated in this act of persuasion was his belongingness to the subjectively perceived group of ‘business people’. He saw himself this way in this context and he argued that others saw him that way, and indeed saw him as someone who understood their world of work. Thus the business people shared a social identity with him and this gave him the basis on which persuasion became effective.

When being asked whether it was as a result of his authority rather than persuasion that made people engage since he was a senior manager in the university, the first Project Director disagreed he had authority in that context. Instead, he argued it was his group identity that made it happen:

“I don’t think it was authority. It was because I wasn’t in a position of authority at that time. I had been, but was now out in the project. They had other supervisors, but because of that prior relationship, they were better disposed to be accommodating than..., I certainly didn’t tell them that they needed to come or anything like that” (project leader PL1, second interview, lines 172-175).

His identity as someone that had their business knowledge and background was confirmed by the business stakeholder group and perceived to be having a positive impact on the communication between the business and the project, evidenced by the following statements made by business stakeholders:

“I think [the first Project Director] would definitely have understanding of the experience for the business in the university. He would definitely, in my opinion, he worked in [Student Services Centre], (and) he sees a lot happening in [Student Services Centre]. I think he would have quite good understanding of what happens around the university and how things are currently done. I am guessing that would inform how well communicative he was as a project leader that helped in communicating things. (...) I can probably see having a background in that culture could either be a positive or a negative, and certainly communication ways, understanding ways of how the university currently operates would absolutely be a benefit. (...) [The first Project Director] has the skill to talk to the university. [The first Project Director] has the skill to understand what the complexities are” (a business administrative manager, BS4, lines 79-84; 89-91; 136-137).

“He (the first Project Director) has the knowledge of the university, he understands how people work and think, and he could rally people around and smooth waters. I mean it’s a very political environment as well, so he was able to navigate that really well” (a transition support staff, TO1, lines 138-140).

“[The second Project Director] certainly didn’t have an understanding of higher education, so I think that, that was also a challenge because you need to have that background, (and) that experience. I mean, [the first Project Director] at

least had the culture, you know what I'm saying, the cultural understanding and the organisational structure and all those things. To not have both is... umm" (a business administrative manager, BS1, lines 310-314).

Therefore, despite the first Project Director lacking project management experience, and although the 'de facto' project leader might not be a good decision, the first Project Director sharing social group identity with the business stakeholders was seen as a benefit for the communication between the business and the project. The first Project Director identified himself with the administrative staff group who had knowledge of the business processes and understood the university culture, as opposed to people who came from outside the university and did not have the business and cultural knowledge. Through his identity as a previous administrator in the university, he found it easier to persuade his in-group members (i.e. the university administrative staff group) than would have been the case if he had been an outsider.

Episode 2: Stakeholder persuasion strategy – the Head of Business Service Areas as the 'Business Champions'

This episode shows the strategy of persuasion involving the business representatives acting as change champions for persuading other business staff members. The 'champion' strategies were used for various stakeholders' engagement, which involved student champions, faculty champions, and academic champions. The 'business champions' were most significant and effective.

In early 2014, it became obvious that the SS project team had no authority power over the business stakeholders. Thus, they had to resort to other ways of gaining power; specifically, they needed to persuade and convince the business stakeholder group to engage. The third Project Director said:

"I don't have authority over those (business stakeholders). That's why I have to use a lot of influential power or skills to get the people like [a business leader] to influence directly her business leads and people like that" (project leader PL5, second interview, lines 180-181).

Instead of sending project team staff to persuade the business staff group, the persuasion strategy of having the ‘business champions’ significantly improved the business-project communication. The Business Heads were asked to chair the working groups and committees of administrators from all around the university, suggesting that:

“Last year we were engaged quite closely and heavily with [SS] in the working groups, and so we were being exposed to what the changes would be for our area” (a business administrative manager, BS4, lines 161-163).

“I was very heavily involved and chairing a couple of working groups and all that type of stuff, very very hands on, very full on, very, (laughter) very time consuming. I had to be. I totally understand that, but it was a lot of work and a lot of pressure obviously” (a business administrative manager, BS2, lines 33-36).

“I think that the way things are now happening is that we in the business are driving so much of it anyway. So whilst [the first Project Director] isn’t this up there figurehead driving it from an institutional perspective, [the third Project Director] is up there as a figurehead over here, and she’s got all of us doing that, so I am hosting working groups with staff from all over the university, and I am trying to persuade them that ‘well, this is what’s been delivered, this is how we need to make it work’. So I think we are doing that work anyway” (a business administrative manager, BS3, lines 397-402).

It indicates that, although reluctantly, the Business Heads understood the necessity of them leading the change in their business area, because it was believed that it would be easier for an administrator than a project staff member to convince another administrator. A Business Head said:

“I think to some degree, the [SS] project staff recognise that, and that is why we are required to drive a lot of this stuff. We are the business theme chairs. We chair these committees, full of people from all around the university, and I think that’s potentially a deliberate strategy of the project because if it was chaired by

project staff member and I was truly on an even playing field as everybody else, that perhaps wouldn't be as easily familiarised, communicated with those parties. So I think they are aware of that. You often hear words like 'champions', they want '[SS] champions' and that's about being able to tap into people to persuade them, to get them to where they need to be, and almost always those champions are the business people, not the project people" (a business administrative manager, BS3, lines 438-447).

This business champion strategy was most effective especially when there were 'anti-SS' sentiments from administrative staff and a sense of frustration at their contribution to the SS project. In order to deal with the negative anti-SS sentiments, the Business Heads had to deliberately distance themselves from the SS project and emphasise their identity as the 'business' people so that they could persuade other administrators, as suggested by a Business Head:

"There was a sense of frustration at their contribution to the [SS] Project, but the way I found myself dealing with some of that, and this is funny, but I distanced myself from the project too in that using powers of persuasion to say 'I am one of you. (Laughter) I am not one of them. I am in the business. [The change to this business area] is coming to me. I am going to try to make sure that what you need it for, we are business ready for it'. So I find that I am persuading by distancing myself from the project. (...) 'I am in the same boat as you. Let's work together so we can make this work' (BS3, lines 410-416; 438).

It is interesting that these business champions distanced themselves from the SS project deliberately. This was a strategy that they used to show and emphasise their belongingness to the business staff group, evidenced by the following statement:

"I had three people from the project there so whenever a technical question would come up, I'd throw to them. I do that deliberately as a strategy to show that's actually not anything I know about. Someone in the project answer that. I did that on purpose because I genuinely believe there is so much [SS] fatigue out there that we need to play our cards right to get where we need to get to. So if I

have to distance myself from the project to get us there, then that's what I will do" (a business administrative manager, BS3, lines 420-424).

Thus, it is an interesting finding that the Business Heads emphasised their identity this way in such a context as they believed that the other business people understood their world of work and this gave them the basis on which persuasion became effective.

The 'champion' strategy was not only used in business engagement but also in the engagement of students and faculties. There were other champions including 'student champions', 'faculty champions' and 'academic champions'. The following statements provide evidence of the student champion strategy, in which the SS project team recruited 'student champions' and 'student volunteers' in the attempt of minimising any potential risk of students' resistance to the new system implementation:

"And students. At the moment, they are on this big drive to get students involved. During orientation week, they had stands about [SS] getting people on board and they've talked about getting 'student champions'. So, again, it's that concept of tapping into students to persuade other students that this is a good thing" (a business administrative manager, BS3, lines 449-454).

"One thing that we are working on at the moment is employing student champions, so we want to employ a paid student champion in each of the key campuses, Now I think this is a good initiative and it's one of the bits that come out of our area so we are driving it. So they will be supporting with the communications with students up until then. (...) What we are looking for is two levels of champions. We are looking for those five that I spoke of, they are paid champions that will work with us, and then we are looking to get some volunteers. So there are different programmes in the university that will tap into where they do provide support for students on a volunteer basis or it's part of a programme that they are doing, so the paid [SS] student champions will work with us, and also volunteers as well, so they are kind of be coordinators of the volunteers, so they themselves will talk to students" (a project middle manager, PM7, lines 608-617; 635-645).

Similarly, the strategy of having a ‘faculty champion’ was also used so as to engage faculties:

“The thing that we’re driving at the moment is we’re finding, and again that’s one of the most useful things that happened for the communication, is all of the faculties have established, what we called project user groups, so they’re kind of driven by the general managers, but each faculty is probably a little bit different. The Faculty of Health are the front runners in this. (...) This is what Health did and we took ‘Health model’ and shared with all the other faculties and said ‘I think you should do something similar’” (a project middle manager, PM7, lines 386-390; 407-408).

Moreover, at a senior level, an ‘academic champion’ was involved. He was the Chair of the SS Management Committee and at the same time a senior academic at the Associate Dean level. Once he became a ‘SS person’, he did a remarkable job influencing other senior academics in AsiaPac University, evidenced by the following quotes:

“The big psychological shift has been at the Associate Dean (AD) level, so it’s the Associate Deans that are much the business owners in the faculty. They are the ones that if a wrong decision has been made in the faculty around curriculum changes or other kinds of unit change, it could cause blowout in the [SS] timeline. And [the academic champion], who is the Chair of Management Committee, has done a fantastic job of socialising the ADs, and now the task is so much easier, so that litany of things that are gathered have all been signed off, because the ADs have all collectively worked on them” (a senior management member, SM3, lines 182-188).

“[The academic champion] is probably closer to the Deans in terms of the level, and he is well respected, again, he can talk to them about, he understands it as well, so he is in a better position to be able to influence because of his understanding of their role and what they would care about” (a project middle manager, PM7, lines 512-516).

The next episode will illustrate specifically how the ‘academic champion’ strategy was effective in persuasion between the university senior academics and the SS project.

Episode 3: Stakeholder persuasion strategy – the academic champion persuading the Dean of the Research Division to meet with the third Project Director, and the third Project Director persuading the Dean of the Research Division

This episode shows the persuasion strategy that was used in relation to the second ‘stakeholder conflicts’ episode in Section 4.4.1.4. Two persuasion activities took place in this episode: the first persuasion was the academic champion persuading the Dean of the Research Division to meet with the third Project Director regarding the conflict the Research Division had with the SS project; the other was the third Project Director persuading the Dean of the Research Division to support the SS project.

The academic champion described the issue that the SS project had with the Research Division:

“Critical issues are around dealing with some recalcitrant groups who wouldn’t come on board. We had trouble with the [Research Division] in the first instance, getting them on board, saying the relevance of [SS] to them. They just had a view they wanted a [sub-system] in hands and that was it, they didn’t really see the rest of their role in the [SS] process” (a senior management member, SM5, lines 259-262).

In this context, the academic champion had two group identities: the Chair of the Management Committee for the SS project and a senior academic at the Associate Dean level in AsiaPac University. With the group identity as a university senior academic, the academic champion was able to persuade the Dean of the Research Division to come to the meeting with the third Project Director. The academic champion said:

“I mean this is the nature of the job that I have. what I had to do is bring [the Dean of the Research Division] into the tent, so I brokered a meeting with [the Dean of the Research Division] and [the third Project Director] around that table,

just like this, and that meeting was ‘we are going to sit here and we are going to sort out what these issues are. I am going to go away here with solutions’” (a senior management member, SM5, lines 296-299).

The academic champion also suggested that it was the third Project Director’s strategy to use him as the negotiator in communicating with the senior academics in AsiaPac University. He said:

“She (the third Project Director) gets frustrated at the time when it takes things to move through. She uses me as a sounding board and a person that has influence to get things done when they might get held up or processes are a bit too cumbersome or time consuming. (...) I have a very good working relationship with those people and that is pivotal to us making things work. If [the third Project Director] can’t rely on the Chair of that Committee to represent her views to [the senior executives], whoever else, then her job has made impossible basically” (a senior management member, SM5, lines 187-189; 246-249).

This was because that the third Project Director did not have authority power over the university business stakeholders, especially the senior management stakeholders. It would be easier for the academic champion than the third Project Director to persuade the other senior academics because he shared the same social group identity with them. The academic champion continued to say:

“Not only I am an academic, I am in a senior academic role, and I’ve been around for a long time and I’ve got that experience that I can draw on it. I think that is the factor that you are on a much better position to persuade people and be assertive about these matters, and then if there was someone at [the third Project Director] team... It’s very important. (...) You have to persuade people, and the position that I have held and I guess the experience that I’ve had makes it possible for me to be more persuasive than others would” (a senior management member, SM5, lines 523-526).

The meeting that the academic champion arranged provided an opportunity for the third Project Director to communicate with the Dean of the Research Division.

“I think in the lead up we thought it was going to be difficult, but when [the Dean of the Research Division] was able to see [the third Project Director’s] viewpoint and a bigger picture and what the issues were with the way they were seeing things, and he is a very busy guy so he wasn’t engaging himself with what his more junior staff were doing, and that was our issue. We wanted him to get engaged. So the only way we could do that in the first instance was to bring him to the table and so that relationship is now much a better relationship” (a senior management member, SM5, lines 301-306).

Further in the meeting, the third Project Director’s excellent communication tactics led to her successfully persuading the Dean of the Research Division. The academic champion described:

“Basically my approach was ‘I am going to let [the third Project Director] do the talking and [the third Project Director] is going to convince [the Dean of the Research Division] or give him a much better understanding of what the role and engagement we wanted from him and why we want that level of engagement’. And she is a very articulated individual. She can put the cards on the table in a very clear and concise way, and she did. I think [the Dean of the Research Division] went out of there much more appraised of what we were trying to achieve and what we wanted from him. And he did then get his people engaged in a way that we wanted them to be engaged. (...) She didn’t have to give anything away. It wasn’t a bartering session. It was ‘here is the situation, [the Dean]. This is the bigger picture of [SS] and how [the Research Division] fits into this, and this is the level of engagement we need. These are the priorities. Yes, we understand that you need to do those reviews, but what we want from you is understanding when you will be finishing those aspects off so that we can get going so we know where there is some certainty in here’. It was all laid on the table very very clearly and articulated by [the third Project Director]” (a senior management member, SM5, lines 326-332; 336-341).

Later in the interview with the Dean of the Research Division, the Dean also identified that he was impressed by the third Project Director's communication and management style when talking with her. The Dean said:

"My first interaction was remote control and I got the impression that she had been deliberately misinformed, that's what I think happened. So I then had quite a lot of meetings with her and with [the academic champion]. And I discovered much to my surprise that I found her to be extremely engaging, because I heard all sorts of things about her but she wasn't anything like I expected, and very interested in the concerns about the misinformation that I think she'd had. (...) I'm pretty impressed I think that, once I met [the third Project Director] and had a long conversation, and I felt much more confident, and then she made an offer about ten days ago that she would like to come down and actually personally come to [the Research Division] and talk to the people and make sure that she wasn't misinformed herself because she wants to be absolute, that I take as a sign to be a pretty good leader. So I am feeling a bit more confident now" (a senior management member, SM2, lines 171-175; 186-190).

Specifically, it was the third Project Director's 'problem-solving mode' in her communication that made the persuasion effective, suggested by the Dean of the Research Division:

"She (the third Project Director) didn't try to push me anywhere. She didn't do any pushing. She got into a 'how can we solve the problem' mode, which is the mode which I feel most comfortable in relating to people, 'okay, so there is a mutual problem, what do we do to get our best outcome'. So I was impressed" (a senior management member, SM2, lines 205-208).

More interestingly, the Dean continued to say that he was persuaded by the third Project Director because he saw her as different from the ordinary IT people whom the Dean did not share a common worldview with:

“My judgment was that she was not overly confident. She didn’t come across as a typical IT person who sounds like a used car salesman. She was much more reflective. She explained where her strengths and experiences had been and was aware that the university is a very challenging environment for her, so I kind of like that more modest approach, she made it clear to me she felt under intense pressure, but I also found that when discussing things with her she listened very carefully and she’s trying to do all the right things. (...) She is senior enough so she is not thinking like the sort of IT boffin, because that to me is a test that she actually can see what can be done with it, not in thrall to its go faster or speed or the latest or whatever. She is not in that mode, so that tells me she is serious” (a senior management member, SM2, lines 194-199).

Moreover, the Dean of the Research Division noted that the effective persuasion between him and the third Project Director not only was because of her good communication and her group identity, but might also come from the respect at a personal level. He said:

“Because she was explaining that she was under a lot of pressure, and there are people ganging up against her particularly some of the heavy duty boys that run the place and I made some comment and she smiled. So what I’m getting at, there was a bit more than just the connection or quick conceptual level of a few at a personal level, can’t explain how that works, but it does. I think she thought that I probably was someone who could help her make the system work, and I’m pretty sure she thought that I treated her with a great deal of respect” (a senior management member, SM2, lines 230-236).

It appears that personal respect may also need consideration as it could influence the effectiveness of communication. This finding was also evidenced in a statement made by a previous project leader:

“I think there are matters of personality, and that sort of thing that played into that, and the approach mutual respect, those sorts of things.” (a project leader, PL1, second interview, lines 200-201).

4.5. THEME 2: NON-HUMAN-RELATIONAL FACTORS AFFECTING THE PROJECT

Non-Human-Relational Factors Affecting the Project was the second theme developed throughout this research that encapsulates the non-human-relational factors that inhibited and facilitated the SS project. This theme is not the primary focus of this research study since this study attempts to investigate power relations between and within social groups. Nevertheless, this theme is included in the findings because it is helpful for contextualising and understanding the first theme *Human Relational Factors Affecting the Project*. Figure 4.4 below illustrates the theme *Non-Human-Relational Factors Affecting the Project* and the analytic categories that have been identified as significant to this theme.

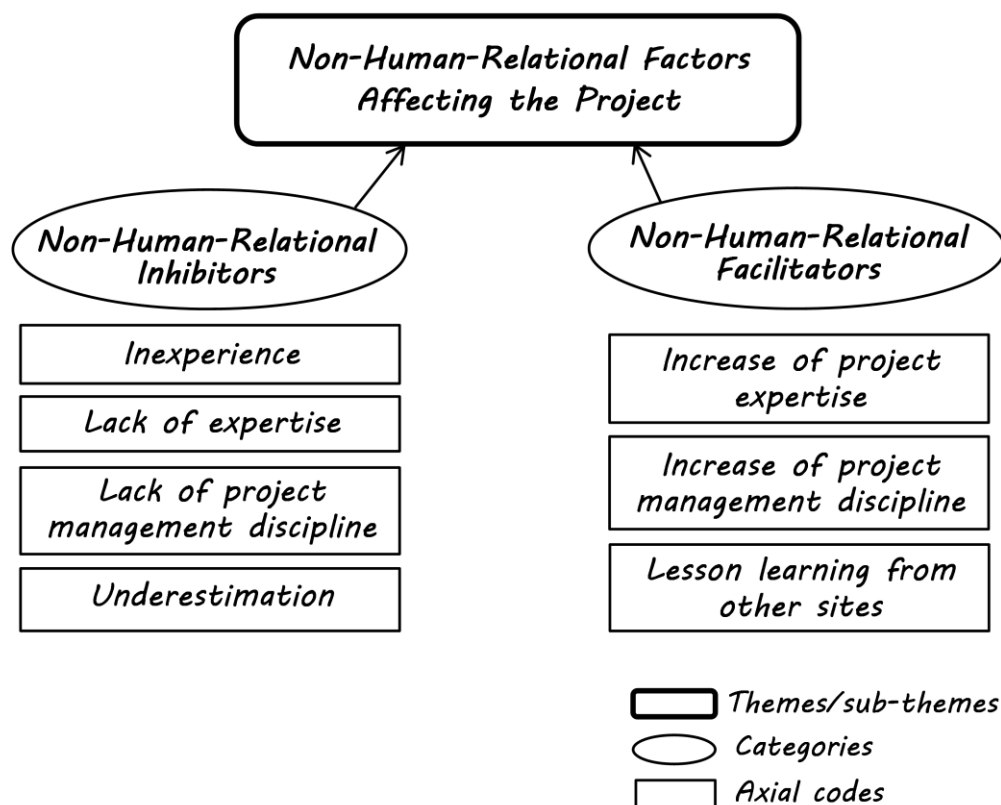


Figure 4.4 Relationship of identified categories to theme 'Non-Human-Relational Factors Affecting the Project'

Category 1: *Non-Human-Relational Inhibitors* relates to the non-human-relational issues that slowed down the progress of the SS project. Category 2: *Non-Human-Relational Facilitators* relates to the non-human-relational factors which led to the SS project progress. The above diagram will be used throughout this section as a basis for discussing the categories and the relevant codes that contribute to the theme.

4.5.1. Category 1: Non-Human-Relational Inhibitors

Non-Human-Relational Inhibitors was a category identified from the multiple stages of analysis. Before getting to the discussion of this category, Table 4.7 below illustrates evidence of the analytical development of this category by providing examples of open codes from which evidence of the category was obtained. The following sub sections describe in detail each of the non-human-relational factors that inhibited the SS project.

Examples of Open Codes	→ Axial Codes →	→ Category
University lacking experience, inexperienced project team, inexperienced project leadership	Inexperience	Non-Human-Relational Inhibitors
Lack of matching skill set, project staff lacked expertise, project leader lacked expertise	Lack of expertise	
Lack of alignment of methodology, poor documentation, lack of project discipline, lack of rigour in the project	Lack of project management discipline	
Underestimation of project complexity, underestimation of project budget, underestimation of business impact, underestimation of project size, underestimation of resources required, underestimation of project timeline	Underestimation	

Table 4.7 Analytical development of category ‘Non-Human-Relational Inhibitors’

4.5.1.1. Inexperience

A non-human-relational problem that the SS project had was inexperience. This axial code of inexperience refers to not only the inexperience of the project team but also the lack of experience of the whole university for a project of this scale and complexity. The following statements provide evidence of the inexperienced project team:

“We had a relatively inexperienced team, inexperienced in the context of the project of this size” (a project leader, PL3, lines 119-120).

“I still think overall though the project was too big to manage with the experience of the people that we had” (a project leader, PL2, lines 543-544).

In particular, the lack of experience of the early project leaders was identified as a major issue, as people suggested:

“The problem is that didn’t really making any progress in those years because none of them really have any experience of large-scale projects, IT projects. [The second Project Director] had a support background, the support for a few IT people. [The Assistant Project Director] was around the small IT team down the [Student Services Centre], maybe four or five people. So none of them had any experience of anything that has the scope and scale of [SS]” (a project IT worker, TW3, lines 170-175).

“They didn’t know what to do with it, so even though we could give them the right things and the right steps to undertake. I think the leadership at the time just didn’t have the experience that they needed to put something this big through. (...) I think it was a lack of experience in leadership mostly” (a project middle manager, PM4, lines 114-116; 159).

“It took a long time to try source someone, [the second Project Director] was sourced at the end. He, in hindsight, we would have been better to get someone probably from one of the big consultant firm with a much better project background, instead of we took someone who was... [The second Project

Director] had good skills in IT and good skills in building business and putting things together and putting systems up, but not necessarily in running any large-scale project in implementation. He was the CEO (in his previous job). So he was very senior, but he came up through the ranks, done various international postings where he had responsibility for system implementation and build... but, much smaller and very different environment” (a senior management member, SM4, lines 35-44).

“It sounds like the university thought they could run this project themselves. Six, Seven years ago whenever it was, the university was like ‘oh we can do this’, and the people they had had no experience in a project of this complexity” (a project middle manager, PM8, lines 205-207).

In addition, the university’s lacking experience in a big IT project like SS was also identified as a critical factor hindering the project, evidenced by the quotes below:

“This programme started on much smaller price point than its current position, and as it has grown in scale, so it has challenged the ability of people to bring effective governance and management to it. It got bigger than things they played before. (...) The other thing I think is that the organisation hasn’t tackled a business project as opposed to a construction project of the scale and complexity before. (...) Secondly, we go back to our scale and complexity. We had people who were used to tackle simpler projects and this required far more discipline” (a project middle manager, PM1, lines 86-89; 128-130; 162-163).

“University is about obviously teaching university students. This is the main focus in business, not running IT projects. So part of me wonders if this university sort of as bitten off more so that it can chew on the project of such a large scale” (a Business Analyst, BA3, lines 50-53).

“I have to say that in my experience [AsiaPac University] hasn’t been good with IT projects. Their record, you know, is not a good record” (a business administrative manager, BS1, lines 380-382).

4.5.1.2. Lack of Expertise

A second non-human-relational inhibitor that emerged from the data was the lack of expertise in the SS project team. That is, not only was there a lack of project management experience, but also there was a lack of appropriate skill set in the team for the scale and the complexity of the SS project. This finding was substantiated by the following statements:

“We’ve got human resource issues, finding enough people competent and knowledgeable enough to engage the project at the level of needing them to” (a senior management member, SM5, lines 442-443).

“What I am seeing also is, and this is kind of diverting but it’s probably an opportune time to say it, is that the quality and experience of a lot of the resources that they’ve had on the program has not really been fit for purpose. So for the size of the thing we are doing here it’s not just the younger ones that came out with all good intent, it’s the quality and fitness for purpose of the resource pool that they’ve been able to attract into the university environment has been probably average. (...) I’ve got very few people with the same value as you need to have to run a project successfully because they are either they have never been on a project or they don’t have the appropriate level of skills. So in other words, they’ve been asked to do ‘this’ job where they’ve actually got skills to do ‘that’ job, so that makes it extremely difficult” (a project leader, PL5, lines 197-202; 521-524).

“There was no change management expert or consultant on that team. They were talking about increasing the strength and increasing the skill base around change management and people doing change management things, but there was nobody on the team as far as I can make out who’s done it in a large scale” (a project leader, PL3, lines 207-210).

“I think in many ways, I knew that under my directorship, because I hadn’t be able to get the right level of project management to support me that we were

just spinning our wheels and treading water, and it was not getting anywhere. (...) we hadn't managed to get the right people into the right position. The project delivery wasn't my area of expertise. (...) That became absolutely evident to me when, as part of trying to come up to speak, I got myself trained in that PRINCE2 methodology and all that sort of thing to try to build up skills. I knew then really this is certainly not my forte" (a project leader, PL1, lines 291-293; 295-296; 300-302).

"To me, even back in the early stage, I would have actually said that we don't have the expertise to do it. It needs to be done externally. It needs to be done by somebody who actually has some skin in the game in terms of another organisational thing" (a project leader, PL2, lines 364-367).

"I mean maybe they should have just got one of those big consultant firms into run the project, because I think the university here doesn't have the expertise to actually run the project" (a project IT worker, TW1, lines 54-56).

4.5.1.3. Lack of Project Management Discipline

Without an adequate level of experience and expertise, the SS project was also lacking project management discipline. The lack of project management discipline was reflected in various aspects, including lack of alignment of methodology, lack of discipline and rigour, and poor documentation. This is evidenced by the following quotes extracted directly from the interview transcripts:

"They started introducing the old Agile techniques which are good and valid. I've done Agile project management in projects before, but they were using it as the need for speed and therefore the lack of discipline and documentation and process" (a project leader, PL5, lines 542-545).

"I think here all the methodology is not working, because when I came here, they were saying 'oh, we also use Agile, we have stand-up', that's why they had stand-up. When I heard that the first time, I thought 'no, that's not going well'. And that maybe only lasted for a month, stand-up is gone. It's going back to

waterfall methodology. (Laughter) It's very poor" (a Business Analyst, BA6, lines 194-197).

"I think when [the second Project Director] was there, it was a bit of panic to get it done, but because it was a panic to get it done, they didn't follow any processes, they didn't document anything properly, and they didn't have experienced business analysts. So what that meant was, because they were trying to short-circuit the proper methodology. By doing that, they were just all running in place. They didn't make any progress" (a project IT worker, TW3, lines 184-188).

Specifically, the following statements indicate the lack of project discipline and rigour:

"The project lacked discipline. You could just see that it didn't have rigidity around it" (a transition support staff, TO1, lines 131-132).

"In projects, I'd say discipline is very very important. So you know, these are signed off, and a project discipline across the board really, that's been pretty lacking in the [SS] project, and it has been very hard process to drag everyone kind of kicking the screen into a project discipline kind of world. It's not discipline in an authority kind of sense, but discipline in that, define deliverables and define ways to get those deliverables, so 'by next Wednesday, I will be to do that', like this. So that kind of thing hasn't been there at all" (a project middle manager, PM3, lines 107-114).

"There were often good ideas, you know, people saying 'oh if we do it this way, we kill these other birds with this one stone as well', so again, there wasn't the discipline to say 'no, this is the scope we've agreed to. If you want to change it, we need to make a case and take it up to the governance'. (...) I think coming back to just the discipline around managing a project and being very very strong about asserting the processes, they were there in name but they weren't actually being applied properly to control things like scope or to control progress

through, so I think that was one of the issues that just wasn't a reasonable way of managing progress" (a project leader, PL1, lines 488-491; 512-515).

Poor documentation was reflected in the lack of keeping record of project processes and the overly abstract documentation (lacking fine details), as shown in the quotes below:

"People haven't been able to find these documents, so our document management has been ordinary" (a project middle manager, PM3, lines 129-130).

"What you do in that business process phase is to understand what we do at the moment and have a very clear picture of that with your modelling or your BPM&N (Business Process Model and Notation) process diagram and all that sort of thing. Everybody knew what they did, so it wasn't ever articulated in a very sharable way. It was certainly in a lot of people's heads, but it wasn't necessarily documented" (a project leader, PL5, lines 52-56).

"It would probably be about the high level, I don't know where the documentation was, within our sort of area, every time like if I need to go and find something, I know exactly where it is, the staff members who have left have, they've saved emails, and shared drives, there is a lot of information there, so it's sort of my level documentation hasn't been a problem, I'm probably in one of the few areas who can say that, and that's probably down to two three good people who have made concerted effort to (a) record everything officially and (b) made sure that was accessible after they left" (a transition support staff, TO1, lines 256-262).

"Frankly, when I joined, there were volumes of documentation produced, but it was all very abstract for people. So this fanciful new system was, just that, it was fanciful. You might see the light of day one day, but you know, I can read comprehensive business plans, business requirements, functional specs, but it's

all paper, I just don't believe this thing really exists" (a project leader, PL3, lines 108-112).

4.5.1.4. Underestimation

A third non-human-relational inhibitor in the SS project was underestimation, especially in the early stages of the project. The underestimation relates to the problem that the early SS project staff, and the university as a whole, underestimated the scale and the complexity of the SS project, which in turn led to the underestimation of the time, budget and human resources that were required to be allocated to the SS project. The underestimation was among the reasons why the SS project was troubled, as indicated in the following statements:

"There was, in my view, an underestimation of the size of what we talked about. It's not saying that there wasn't senior endorsement but it was seen as a little pea project as against a major student implementation which you have across the whole organisation. So that was hard to get those attraction and engagement. (...) I think absolutely the size and complexity, and a lack of understanding across the board in terms of the resources needed and then of the skill sets needed to actually push this project forward. (...) I think what they tried to move forward with, you know in terms of the scope that was given, the resources and the budget that were given, as again, and the size of the task, was actually quite unachievable" (a business administrative manager, BS1, lines 46-50; 96-97; 112-114).

"They said that 'oh it's just a project. It's not that big a deal kind of thing', but it's actually a massive project. It replaces all of the systems. I don't think they had early on really grasped how big it was. (...) So I think there was a big underestimation of exactly what it was going to take" (a Business Analyst, BA7, lines 94-96; 111).

"We were totally off the mark in terms of the initial business case in terms of the numbers required, the time required, and all the rest of it, totally off the mark,

and that's based on the advice we received from a number of places so it wasn't what we just came up with, but we were totally off the mark and I take responsibility for that" (a project leader, PL1, second interview, lines 580-583).

"I wasn't involved in the early stages of it, but the size of the activity was underestimated, the resource was underestimated. (...) I think it does come back down to that sort of cost, time, quality thing. We're doing it within the budget that we've got and the timeframes that we've got, we have to compromise, and I mean that (quality) thing. That is the only thing that you can really compromise on. I mean I think the sad thing is that it wasn't understood from the start and it needed to be" (a project leader, PL2, lines 84-85; 732-737).

"It's a very naive they put together project. This is far more complicated than it should ever have been. So when people came in here, they clearly didn't look at the whole thing and they stuck a whole lot of bits together that are very complex to make work, but it was kind of a naivety, that's all I'll put it to. So it's a very very complex project when it shouldn't have been that complex at all" (a project middle manager, PM5, lines 59-63).

"Complete underestimation of how much work was required, how many people required, to make it happen. From the outside of it, keep in mind, I've had a bit of both sides over the fence, because I was in the [Student Services Centre] working as a manager there before I worked in (the old) student management systems, before I then moved into the project, so I was there when they were coming around doing all the understanding of processes, all of the pre-pictures and all that stuff, and there was just complete lack of understanding of the project out to process like [Student Services Centre] and thinking that people would just be able to do these things as part of their day-to-day job and be available as and when we required, in a workload environment there was already eight to eight in a day" (a Business Analyst, BA1, lines 50-51; 96-103).

Due to the underestimation, the time and budget constraints then became apparent to the SS project staff and caused problems in the project, as they suggested that:

“We don’t have enough time or resources at the moment so it increases the pressure on the project to deliver something” (a training agent, TT1, lines 214-215).

“So she (the second Project Manager) was left in a very difficult position where [the second Project Director] had failed to deliver on the commitment he made, and she had to try to pick up the pieces and prepare a new submission for lot of things, having a new budget request and a new time request and that’s a very very difficult undertaking. And particularly when the reality is that [the second Project Manager] was sort of in a situation where, like what I tried to mention before, she couldn’t ask for what she knew was really necessary because she was basically told ‘you can’t ask for that, you can’t go to Council’ by people, by executives, ‘you are only allowed to ask for this much, and you are only allowed to ask for this much time’ whereas knowing that’s not enough time and not enough money” (a project IT worker, TW4, lines 159-167).

4.5.2. Category 2: Non-Human-Relational Facilitators

The second category associated with the theme *Non-Human-Relational Factors Affecting the Project* is the non-human-relational facilitators that were achieved during the later stages of the SS project. Table 4.8 below describes how this category has been developed, and indicates the axial codes and examples of open codes that contributed to it.

Examples of Open Codes	→ Axial Codes →	→ Category
External specialist expertise, project leader expertise	Increase of project expertise	Non-Human-Relational Facilitators
More project rigour and discipline, better tracking project deliverables, better planning in the project, better traceability, better documentation	Increase of project management discipline	
	Lesson learning from other sites	

Table 4.8 Analytical development of category ‘Non-Human-Relational Facilitators’

4.5.2.1. Increase of Project Expertise

A major non-human-relational facilitator in the SS project was the increase of project expertise. With the realisation of the need to have professional project management knowledge in the team, external project specialists were widely recruited since the second Project Director joined the SS project. The increase of expertise positively influenced the SS project. Among the increased externally recruited career project specialists in the project team, the third Project Director had the most significant project expertise that benefited the project, as commented by the following people:

“[The third Project Director] as also not necessary had higher education experience but has had the experience of a massive project that requires major system implementation and integration and massive cultural change. (...) I think what in fact that [the third Project Director] brings, it is by virtue of the fact that she’d actually gone in and salvaged projects before and turned them around. So she’s developed that over time, it’s not something that you just instantly have. And I think part of the problem way back when was if we don’t have [the third Project Director], it wouldn’t have been different, because people were expected to do things that they have had no experience or skill set in” (a business administrative manager, BS1, lines 254-256; 300-304).

“She’s certainly got considerable expertise, certainly an impressive lady who really knows this stuff, but she hasn’t been afraid to do what I perceive that the previous Project Directors were afraid to do, and that’s ‘don’t tell me what to do. You’ve hired me to get the project in on time. You won’t get the project on time unless you do this, allow me to do that, or it won’t come in’. So, and this that she has done is unpack all the project, ‘what do we need to do’, ‘what is our exact scope’, ‘let’s get the scope signed off’. I hadn’t got the scope signed off up to that point. To me, as a project, that was just ‘wow, how did we not do that’” (a project middle manager, PM3, lines 307-313).

“[The third Project Director] obviously brings in a level of project management expertise, which is much much greater than we’ve had to date and is a very

strong person, very keen on the delivery aspects” (a project leader, PL1, lines 380-382).

“She (the third Project Director) came on board and she made it really clear that she could fix the problem, and she has skills that fix it, her background was very much around reviving projects that had gone off the rails, so she is perfectly placed to help us with ours as it has gone completely off the rails” (a senior management member, SM4, lines 179-182).

“I’ve learned so much about project management just watch [the third Project Director]” (a senior management member, SM5, lines 413-414).

4.5.2.2. Increase of Project Management Discipline

With the injected expertise of the third Project Director and the other project specialists, there was then a significant increase of project management discipline. The increase of project management discipline included improvements in project discipline, accountability, traceability, and documentation.

The following statements indicate the improvement of the accountability, traceability and documentation in the SS project thanks to the third Project Director:

“She’s (the third Project Director) actually bringing in the expert, the data conversion, the architect solution. They’re all there within their own right. They’re not being up across. Therefore that level of connection. And also to the accountability, and you know, the structure around reporting and accountability and tracking and moving things, it’s so much more visual” (a business administrative manager, BS1, lines 269-272).

“We probably can make the go-live date as the management wants. The reason I said we are on track or everything has been improved is because largely we have the project processed. So I have a Project Plan I am working to, I have this project process to define, the agreements have been signed off, I know who is responsible for what, I know, well, all the project disciplines that you would see

in the PRINCE2 manual, the best practice way in the project we are now doing those kind of things. (...) So we know how to set our scope, we know what are the processes all the way through, so even if, I'm not making any judgement, but more important for me is that we will have an idea of whether we can or not. So we won't have 'we've got 20 days to go, how we are we dealing with a million days of work' which was what happened last time. That situation will not arise again, because we are tracking all of our stuff. The items sitting in my computer tell you how many of these we've done and how many days in this stage and blah blah blah, that we could have done before" (a project middle manager, PM3, lines 280-284; 315-320).

"More recently, peer review work that other people have done in that area especially the contractors that we've had coming in and have been responsible for making sure everything is documented so it can be traced and people know what to do to fix up things and configure new environment for testing purposes" (a project IT worker, TW2, lines 46-49).

A senior management member also identified that there was better project discipline and direction under the third Project Director's directorship:

"There is a whole bunch of things in place, and [the third Project Director] brought in this amazing project discipline and an overarching view, a helicopter view of thing that I don't think anyone had before" (a senior management member, SM5, lines 172-174).

4.5.2.3. Lesson Learning From Other Sites

A third non-human-relational factor that aided the SS project was the strategy of consulting and learning lessons from the other sites in which the same system had been implemented. The following quotes present how learning from previous implementation experiences in other sites would benefit the SS project in AsiaPac University:

“One thing we did recently was a few of us went to visit other universities who implemented the [student system], the last three universities to implement it. (...) We heard stories of people going on stress leave or people leaving three weeks after go-live, all of that. So we are consciously trying to prepare for that. And we know that it will still happen in some cases, but we are looking at much more increased support people, by that, increasing resourcing in the business (that they) already know, increasing engagement about what’s coming, what impacts will be. A meeting that I had here earlier was looking at that and saying ‘how do we communicate this, on the ground, at the management level, at executive level, so consciously trying to pre-empt some of that” (a project leader, PL4, lines 256-258; 265-271).

“Over time, there were various reviews done around the state of the project relative to understanding how other universities fail. Every university that has attempted this project failed so far, so we wanted to understand why they failed, then they did a review of processes to see whether there were similar comparisons and traits that we were inhibiting which would suggest we were going down the same path” (a senior management member, SM4, lines 154-158).

“They were doing tours up the east coast pretty much to universities who had implemented or already been implementing. I was on [a different university] upgrade project so heading out the business solutions over there. Then I met with my project manager from up there, and myself chose to go to the lessons learned and that kind of stuff, she was then commissioned to do a review of this project” (a project middle manager, PM4, lines 101-105).

“One event that really helped us BAs was when all the academic admin managers went for a field trip to [a different university], which is another site, another university that uses [the student system]. So they went there and they spent, I think it was a week there, just talking to people and having meetings about how the implementation of [the student system] went, and how [the student system] was used within the university, and they came back from that,

and I think their eyes were opened a lot in terms of what we've been saying to them that they weren't sure of the context, they weren't sure how to use it in practice. So they came back and they can see 'oh, now I know [this BA] is talking about, what [another BA] is talking about this is how system is used'. So it's useful that [the student system] is actually used across a whole range of universities, because then they can be influenced by other universities and how they use the system (a Business Analyst, BA4, lines 238-248).

4.6. CHAPTER SUMMARY

This chapter has presented the findings of the analysis of the research data collected via the methods outlined in Chapter 3. Each theme and sub-theme was discussed individually. The above discussions have provided insights into the existence of themes and sub-themes that reflect the factors affecting the SS project progress.

The next chapter will discuss the significance of these research findings in relation to the current literature, especially the theoretical framework, and in answering the research objectives and questions.

CHAPTER FIVE

INTERPRETATION AND DISCUSSION

5. CHAPTER FIVE – INTERPRETATION AND DISCUSSION

5.1. INTRODUCTION

This chapter discusses the findings from the data analysis (see Chapter 4) in relation to the current literature and answers the research questions. The chapter continues the interpretation by providing deeper insight into the analytical development of the emergent themes, sub-themes, categories and axial codes. A particular focus is drawn on human relational matters as the purpose of this research is to explore social and power relations within the context of Information Technology (IT) projects. This chapter is structured into the following sections.

- Section 5.2 re-introduces the research aims, the research question and subsidiary research questions. The subsidiary research questions SRQ1 and SRQ2 were answered by Chapter 2 *Literature Review*. These answers are summarised in this section.
- Section 5.3 reviews and summarises the findings which emerged from the analysis of the data presented in Chapter 4. The subsidiary research question SRQ3 is answered in this section.
- Section 5.4 presents the outcomes of this research. This section provides answers to the rest of the subsidiary research questions from SRQ4 to SRQ8 by presenting further interpretation and discussion of the findings, in relation to each principle summarised from Turner's theory as introduced in Section 2.5.2. The interpretation is undertaken from Turner's perspective and from other perspectives in the extant literature. The subsidiary research questions will not be answered in order as the section is structured according to the principles of Turner's theory. The overarching research question is answered by summarising the research findings. It concludes by presenting and explaining an augmented Turner's Three-Process Theory of Power.
- Section 5.5 provides a summary of this chapter.

5.2. REVIEWING THE RESEARCH QUESTIONS

This section presents a re-introduction of the research aims and research questions to provide focus for the discussion in this chapter. As presented in Section 1.3 and Section 3.2, this research explores power relations in the implementation of an information system, between different project stakeholder groups and within the project team. Further, this research explores the value of Turner's (2005) Three-Process Theory of Power. Specifically, the research objectives include

- (1) the investigation of power relations, between stakeholder groups and within the project team, during an information system (IS) implementation; and
- (2) the exploration of the value of a new lens with which to view power – Turner's (2005) Three-Process Theory of Power and to compare the findings using Turner's theory with the insights generated by the existing social theories used in IS.

The overarching Research Question (RQ) explored within this research is:

RQ: What level of understanding and what insights are provided by using Turner's Three-Process Theory of Power as a theoretical lens to investigate power relations in IT Projects?

Further, the Subsidiary Research Questions (SRQs) are:

SRQ1: What are the main principles and ideas of Turner's Three-Process Theory of Power? What are the possible implications for power relations in IT projects?

SRQ2: What are the significant theories that have been used to understand and explain power relations in IT projects? How does Turner's theory compare with these theories? What are the significant differences?

SRQ3: What are the major issues and problems that affect the implementation and institutionalisation of IT projects?

SRQ4: What is the nature of power? Does power emerge from only one source (psychological group formation), or does power emerge from other sources such as the several bases as French and Raven (1959) assert in their classic paper?

SRQ5: Does an IT project leader gain influence over others in the project when they are in the same psychological group with the target(s)?

SRQ6: Does the formation of different psychological groups in organisations influence the power relations that affect the implementation and institutionalisation of IT projects?

SRQ7: Does power consist of persuasion, authority and coercion? Is power applied through processes of persuasion, authority and coercion and what is the nature of these processes?

SRQ7a: How is persuasive power gained and exercised in the management of IT projects?

SRQ7b: What role does the power that emerges from legitimate authority play in the management of IT projects?

SRQ7c: What role does coercive power play in the management of IT projects?

SRQ8: Does Turner's theory give a reasonable explanation for the phenomenon of resistance behaviours involved in IT projects?

As identified in Figure 3.4 (the three research stage design) in Section 3.5.2, SRQ1 and SRQ2 have been answered by Chapter 2 *Literature Review*.

SRQ1: What are the main principles and ideas of Turner's Three-Process Theory of Power? What are the possible implications for power relations in IT projects?

The five key principles of Turner's Three-Process Theory of Power that were summarised in Section 2.5.2 answer the first part of SRQ1. These principles are:

Principle 1 – People tend to self-categorise into psychological group(s) and these self-categorisations become relevant in determining behaviours in particular contexts or situations.

Principle 2 – Psychological group formation produces a situation of mutual influence through a shared identity, which forms the basis of power through persuasion.

Principle 3 – Authority is the power based on in-group norms that group members ought to follow a specific person or position (leader) that has the right to control them in certain matters.

Principle 4 – Coercion is the power to control a target against their will through the deployment of resources to constrain and manipulate their behaviour.

Principle 5 – Resistance can be understood as a response to perceived coercion to an extent or a perceived threat to the psychological group identity that people wish to retain.

The first principle concerns the nature of power; that is, power springs from the formation of psychological groups and this group formation is determined by people's self-categorisation in the given social context. The other four principles concern the operation of power. In particular, Principle 2, 3 and 4 discuss the three processes of exercising power, namely persuasion, authority and coercion. Principle 5 discusses the potential reaction to the exercise of power. In contrast to theories with a broader and more societal focus (Foucault, 1977, Giddens, 1984) and theories that rely on the notion that power springs from the control of resources (Festinger, 1950 #485; Deutsch, 1955 #486; Kelman, 1958 #475), the principles of Turner's (2005) theory provide a potentially more useful framework for understanding power as it considers not only the nature of power, but also the operation of power and its potential effect.

The four key themes in IT projects that were summarised in Section 2.3 answer the second part of SRQ1. These themes include

- power-resistance relationship,

- communication,
- participation, and
- articulating or building a vision for change.

These four themes provide important implications for power relations between stakeholder groups in IT projects. As IT projects involve embedding new systems and new technology in organisations, IT projects are often troubled by stakeholder relational issues due to the organisational changes the system implementation may trigger. The most common issues include user resistance (Ford et al., 2008, Klaus et al., 2010, Ritbumroong et al., 2013, Selander and Henfridsson, 2012), ineffective stakeholder communication (Fidler and Johnson, 1984, Gillard, 2005, McKay et al., 2010, Lewis and Seibold, 1998), lack of user participation (Heller, 2003, Markus and Mao, 2004, Devine, 2010), and issues of power dynamics in organisational changes (Boonstra and Gravenhorst, 1998, Munduate and Gravenhorst, 2003, Hardy and Clegg, 2004).

The four themes of power also provide implications for understanding power relations within an IT project team. Inside an IT project team, the important themes are commonly presented in resistance to power and domination (Pushkala and Anshuman, 2000, Rusaw, 2000, Courpasson and Dany, 2009) and intra-team disagreement and communication issues (Chang and Yeh, 2014, Barki and Hartwick, 2001).

SRQ2: What are the significant theories that have been used to understand and explain power relations in IT projects? How does Turner's theory compare with these theories? What are the significant differences?

SRQ2 has a further three sub-questions. Section 2.4 answers the first sub-question of SRQ2. The significant theories that have been used to understand and explain power relations in IT projects include

- the theories concerning the bases of power:
 - French and Raven's (1959) taxonomy: five bases or sources of power,

- Foucault's (1977) theories of discipline and power (Doolin, 2004, Knights and Vurdudakis, 1994, Doolin, 1999),
- Lukes' (1974, 2005) Three Dimensions of Power Theory (Howcroft and Light, 2006, Markus and Bjorn-Andersen, 1987);
- the theories concerning the processes or structures of power:
 - Giddens' (1984) Structuration Theory (Hussain and Cornelius, 2009, Brooks, 1997, Chu and Smithson, 2007, Spiegel et al., 2012),
 - Clegg's (1989c) Circuits of Power Theory (Smith et al., 2010, Silva, 2007, Silva and Backhouse, 2003, Silva and Fulk, 2012),
 - Latour's (1986) Actor-Network Theory (Bloomfield, 1991, Bloomfield et al., 1997, Bloomfield, 1995); and
- the literature concerning personal characteristics and skills or tactics in the application of power (Yukl and Tracey, 1992, Yukl et al., 1993, Kipnis and Schmidt, 1980, Anderson and Spataro, 2008, Keltner et al., 2003, Yukl and Falbe, 1990, Kelman, 1958, Enns et al., 2001).

Section 2.5.3 answers the second and third sub-questions of SRQ2. Turner's (2005) Three-Process Theory of Power shares similarities with various aspects of the social theories on power that have been outlined above. These similarities are presented in that

- Turner's understanding of persuasion is highly consistent with French and Raven's (1959) 'reference power' as the ability to influence, and shares similarities with Giddens' (1984) 'structure of signification', Clegg's (1989c) 'facilitative power', and Lukes' (1974, 2005) 'ideological power';
- Turner's understanding of authority also shares similarities with the 'legitimate power' in French and Raven (1959), the 'structure of legitimation' in Structuration Theory (Giddens, 1984), dispositional power in Clegg's (1989c, 2006) circuit of social integration, Lukes' (1974, 2005) non-decisional power, and Foucault's (1977) disciplinary power; and

- Turner's understanding of coercion concurs with the 'coercive power' in French and Raven (1959), 'structure of domination' in Giddens (1984), 'causal power' in Clegg (1989a), and 'decisional power' in Lukes (1974, 2005).

The most significant difference between Turner's theory and the above social theories is that Turner introduces a new way of understanding the nature of power – psychological group formation (Turner, 1984), and explains each process of power through the social identity approach (Tajfel and Turner, 1986, Turner, 1987a). Another difference is that Turner provides an explicit explanation of the causal relationship of power and control of resources and incorporates instances where control of resources is resorted to, whereas in the above traditional social theories, there is a lack of analysis of this causal relationship. Overall, associating these theories together may strengthen Turner's contribution to the IS field.

The following sections in this chapter will answer the questions SRQ3 to SRQ8.

5.3. SUMMARISING THE INITIAL FINDINGS

This section provides a brief summary of Chapter 4. The case study method that was described in the previous chapters allowed the researcher to illustrate aspects of Turner's theoretical lens by reference to the specific episodes in the case. The findings in the Chapter 4 answer SRQ3.

SRQ3: What are the major issues and problems that affect the implementation and institutionalisation of IT projects?

It has been found that the major issues and problems that affect the implementation and institutionalisation of IT projects include both human relational issues and non-human-relational issues. The human relational issues include

- the intra-project team human relational issues:
 - ineffective project leadership,
 - ineffective project team communications,
 - negative perception of project team culture,

- project team instability,
 - project team member conflicts; and
- the project stakeholder group relational issues:
 - negative perception of organisational culture,
 - organisational instability,
 - ineffective stakeholder communications,
 - stakeholder conflicts.

The non-human-relational issues include

- inexperience of project team and the whole university for an IT project of this size;
- lack of expertise in the project;
- lack of project management discipline in the project; and
- underestimation of project scope and complexity, and accordingly, the budget and timeline.

It has also been found that the human relational issues played a bigger role than the non-human-relational issues in inhibiting the project progress. This finding reflects the importance of the scope of this research project, which is focused on social and power relations within IT projects as stated in Section 1.2 and Section 1.3.

According to the focus upon social and power relations in IT projects, the rest of the subsidiary research questions (i.e. SRQ4 to SRQ8) have considerable relevance to human relational matters, particularly power-related behaviours. This relevance was presented by the first theme *Human Relational Factors Affecting the Project*. The following diagram (Figure 5.1) graphically summarises the relationship of each of Turner's principles to the first theme, more specifically, to their relevant axial codes. The causal relationships between the axial codes and between the categories are also shown in the diagram. This diagram is used as a basis for the further discussion and interpretation in this chapter.

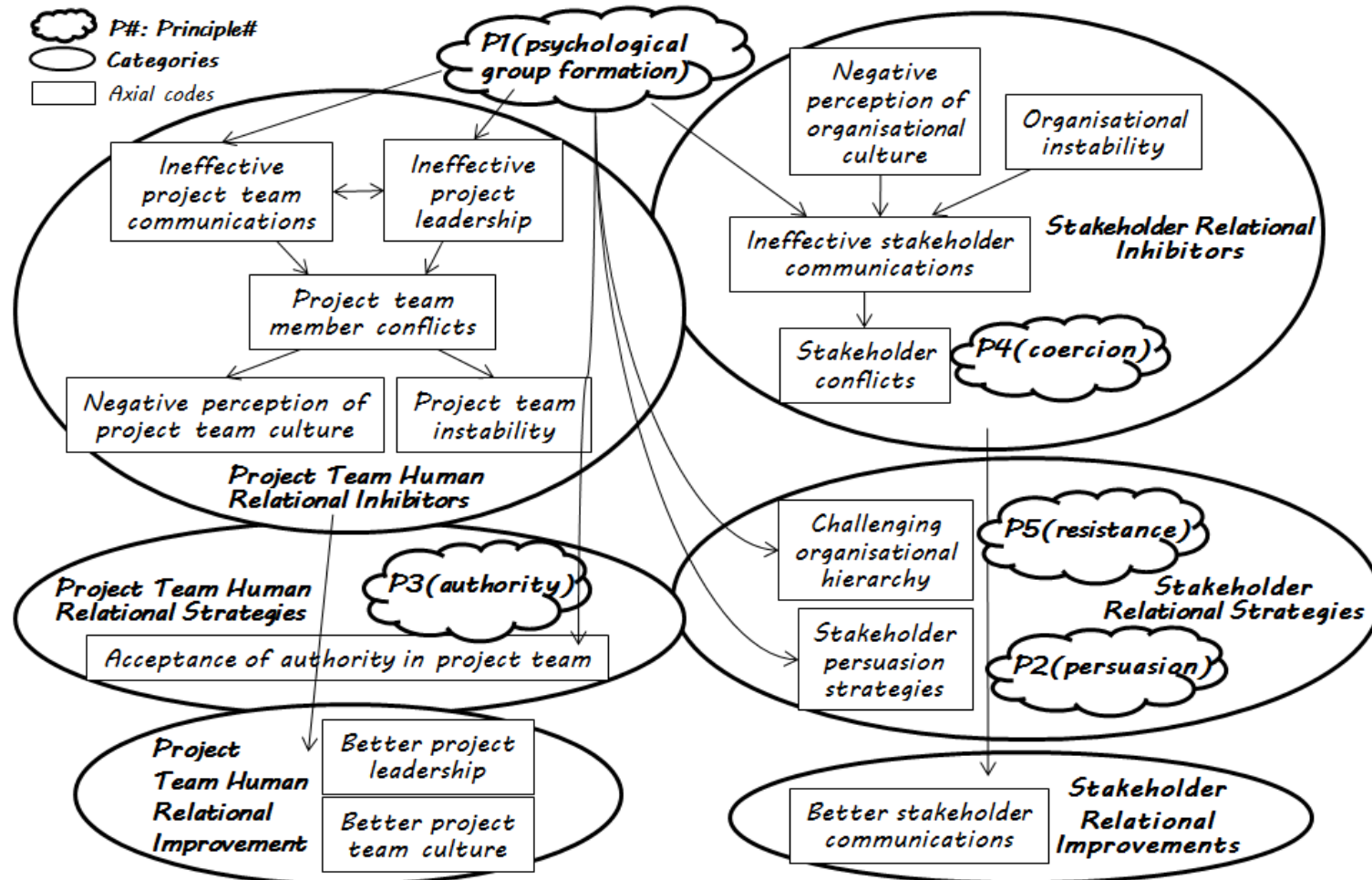


Figure 5.1 Relationship of principles to the axial codes and categories of theme 1

As identified in Chapter 4, and shown in Figure 5.1, five human relational issues were identified within the Student System (SS) project team. The findings suggested that *ineffective project team communications* and *ineffective project leadership* were largely driven from potential discrimination between different psychological groups. When the issues of ineffective communication and ineffective leadership deteriorated to a point, *project team member conflicts* occurred. The episodes of *project team member conflicts* have identified in detail how psychological group difference and discrimination led to the group conflicts. These conflicts further led to *negative perception of project team culture* and *project team instability*. The project team culture was then negatively perceived as unpleasant, political, and even bullying. Moreover, frequent and considerable changes happened as a result in project staff, leadership, reporting lines, and even project team restructure.

Outside the SS project team, *ineffective stakeholder communications* also appeared to be the result of potential discrimination between different psychological groups. The psychological group difference was likely to be more significant between stakeholder groups than between sub-groups within the project team. These ineffective communications were largely presented between the SS project team and the business stakeholder group, and reflected in the lack of senior engagement and support. It appeared that the university senior management (e.g. Project Sponsors, SS Management Committee, SS Steering Committee) played an important role in the selection of the successive Project Directors, and unfortunately, the first two appeared to be poor decisions. During the first two Project Directors' periods, once a Project Director had been appointed the senior management did not seem to use the power (persuasion or authority) that they as a psychological group would have been expected to hold, in any sort of ongoing way; once the project showed signs of failure the senior management seemed to 'stamp its foot' in anger without a rigorous level of analysis. It was also found that the alignment with the SS project seemed to be perceived negatively by the business staff group. For example, when the early project leaders were newly seconded from the business into the SS project, there was an influential close relationship between the project and the business as the seconded project leaders maintained their influence in the university. However, when the seconded

project leaders assimilated into the project and became more 'project like', the business staff group started to feel that these seconded project leaders' influence separated the SS project and the business greatly because they made decisions in the project based on little consultation with the current business staff members. This interesting finding suggests that people form groups psychologically, and such psychological group formation can impact on the progress of an IS implementation.

Aside from the factor of psychological group discrimination, the stakeholder communications were also affected by *negative perception of organisational culture* and *organisational instability*. The organisational culture was perceived differently by different people, or from different points of view. Some interpreted the university as a bureaucratic environment, which led to inevitable bureaucratic (Clegg et al., 2011). The SS project staff felt hampered by too many meetings and noted a lack of efficient decision making. Others interpreted the culture of the university as too participative, and thus people could be overly flexible with changes they wanted in business processes. This made the implementation of an off-the-shelf package like SS extremely difficult as ready-made off-the-self products are not developed for specialised or individual needs. No matter which way the organisational culture was perceived, however, these negatively perceived cultural aspects constrained the progress of the SS project. Further, other organisational changes in the university and the consequent high university staff turnover also exacerbated the communications between the stakeholder groups around the SS project.

The improvements of the SS project were presented differently within the project team and outside the project team. Things within the project team that were improved and then facilitated the project were the leadership and team culture, whereas outside the project team, improvements were mainly presented in stakeholder communications. It can be inferred that stakeholder communications play a critical role in determining the success of a project. The reason that the organisational culture and the organisational leadership were not among the things that were improved may be due to the fact that these two organisational factors were relatively stable and not easily changed by a single IT project.

Interestingly, the strategies that made the improvements possible and used within the project team were found to be different from those outside the project team. As shown in Chapter 4 and Figure 5.1, *acceptance of authority* was the effective strategy inside the project team for managing the human relational issues. Although persuasion also emerged in the codes with respect to the intra-project team relations, it occurred within a psychological group and acted in the way that the project staff supported their group members against the others whom they did not identify with. Thus, persuasion was not interpreted as a strategy for dealing with the intergroup issues within the project team. Instead, it appeared that project staff tended to accept a command or decision made by their superior in the project team. It was indicated that this was because they were willing to submit to the legitimate authority of their superior that was conferred by the project team hierarchy.

However, outside the project team, authority power became no longer effective between the project team and the other stakeholder groups. This was due to the fact that the project leaders did not feel they had the legitimate right to tell a business stakeholder what to do, especially when the project leaders came from outside the university. The business stakeholders did not see the SS project leaders as higher than themselves in the organisational hierarchy either. Many business stakeholders did not see the SS project leaders as sitting in their reporting line. Due to the lack of authority power over university business stakeholders, the SS project team had to resort to *persuasion strategies* to manage the stakeholder relational issues. However, a direct persuasion seemed to be difficult between the SS project team and the business staff group. The project team had to rely on a number of business representatives to act as the 'change champions' for persuading their university colleagues. The persuasion between the change champions and their business people was enabled by the sharing of a 'business stakeholder' identity and therefore shared belief and attitude within their psychological group. This interesting phenomenon supports Turner's (2005) notion of persuasive power that springs from psychological group formation.

The second strategy between project stakeholders that emerged to be effective was *challenging organisational hierarchy*. The data suggested that, among *ineffective*

project team communications, a critical issue was that the project team staff seconded from the university business areas were submissive to the organisational hierarchy, and thus they tended to convey better-than-real news. When the externally recruited project staff came on board, they challenged the organisational hierarchy when facing unrealistic mandates. In particular, the third Project Director reported the whole story to the university senior group. Her challenging the hierarchy was made possible because she and her externally recruited project specialists were less submissive to the university authority than the university sourced project staff. The third Project Director did not see the unrealistic mandates as within the legitimate authority of the university senior group. More importantly, it was also her firm approach and her expertise and experience in managing big IT projects that made her resistance to the organisational hierarchy possible.

The above paragraphs provide a summary of the initial findings from the data analysis presented in Chapter 4. A further interpretation of the findings will be provided in the next section by discussing each principle in detail in relation to the research questions and the relevant episodes in the case.

5.4. DISCUSSION, INTERPRETATION & EXTENSION OF THE FINDINGS

From the summary of the initial findings presented above, this section provides a discussion of the findings in relation to the current literature. The discussion is a result of the further interpretation of the initial findings through Turner's (2005) theoretical lens. As shown in Chapter 4, the data analysis resulted in themes, codes and relevant episodes that constituted the initial findings. The themes, codes and episodes will be discussed and further interpreted through each key principle of Turner's theory as stated in Section 2.5.2. During this further interpretation, each subsidiary research question from SRQ4 to SRQ8 will be answered, not necessarily in order.

5.4.1. Principle One of Turner's Theory

People tend to self-categorise into psychological group(s) and these self-categorisations become relevant in determining behaviours in particular contexts or situations.

The first principle of Turner's theory concerns the nature or sources of power. In Turner's (2005) terminology, social behaviours around power relations are determined by the formation of psychological groups. The formation of psychological groups comes from the tendency of people to self-categorise into psychological groups so as to give meaning to their social life. This principle relates to the sixth subsidiary research question that is shown below.

<i>SRQ6: Does the formation of different psychological groups in organisations influence the power relations that affect the implementation and institutionalisation of IT projects?</i>
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The answer to SRQ6 is that psychological group formation did happen in the SS project and influence the power relations that affect the project progress. There are six episodes in which psychological group formation was found to be among the determinants of power-related behaviours surrounding the SS project. These episodes are summarised in Table 5.1 below. This table also indicates how psychological group formation determined behaviours around power relations in each episode.

Episode No. (in the code)	Axial codes	Episodes where psychological group formation determined behaviours	How psychological group formation determined behaviours
1	Project team member conflicts (also see Section 4.3.1.5)	Hostile sentiments and covert resistance, where conflicts occurred between ex-business Business Analysts (BAs) and externally recruited BAs, and at a higher level, between ex-business project staff and the project leaders' external recruits. As a consequence, the externally recruited BAs were isolated by the ex-business BAs from the key discussions with the business group. The issues raised by the ex-business BAs seemed to be ignored by the project leaders as they only listened to their external recruits. The lack of effective communication then caused the ex-business BAs' covert resistance.	The conflict between the externally recruited BAs and the ex-business BAs was because they did not identify with each other. It was also because of their high self-esteem. While the ex-business BAs were not valued as 'real BAs', they believed they had more knowledge of the business and understood more the philosophy of the university than the externally sourced project staff.
1	Acceptance of authority in project team (also see Section 4.3.3.1)	Acceptance of authority, where the first Project Director accepted the formal legitimisation of the Steering Committee to make the decision of external review. This submission to authority conferred by the organisational and team hierarchy short-circuited the debates so as to help the Steering Committee be aware of the project status and make change to proceed.	Despite disagreeing with the Steering Committee decision, the first Project Director obeyed it because he saw himself as belonging to the SS project staff group, and thus he viewed the Steering Committee as legitimate authority he was willing to follow.
1	Stakeholder conflicts (also see Section 4.4.1.4)	Coercion triggered overt resistance, where university senior management brought considerable pressure to bear on the third Project Director insisting that she meet a deadline that the senior management wanted to accept. This act of coercion failed after the Chief Information Officer (CIO) having to leave the university as the Project Director overtly and strongly resisted to, what she believed, the unattainable deadline. The Project Director then quickly gained control of authoritative resources, time, and funding.	The third Project Director was not easily persuaded by the CIO and the senior executives because she did not feel the CIO and the senior executives shared her identity as a professional IT project manager, and further, she did not feel they had the legitimate right to demand such an unrealistic and unreasonable deadline.

2	Stakeholder conflicts (also see Section 4.4.1.4)	Stakeholder conflicts, where the BA who was seconded from the Research Division to work in the SS project made decisions about business requirements without adequately consulting with the current Research Division administrative staff. When the gap in information was found, the project team was annoyed by the changes in the business processes, whereas the Research Division perceived the BA tended to use the power of her position in the project to go against her old colleagues who she did not have a good relationship with.	The Dean of Research Division interpreted the conflict between the Research Division and the SS project as because the BA shared the identity of the IT people who the Dean did not share an identity with. In addition, the Dean tried to defend his identity in the SS project as the business user stakeholder group against the IT people likes in the SS project.
1	Stakeholder persuasion strategies (also see Section 4.4.3.2)	Persuasion through shared knowledge and background, where the first Project Director sought business engagement for requirement analyses. The administrative staff were willing to contribute to the project activities as they believed that the Project Director who was a previous administrator understood their world of view.	It was easier for the first Project Director to persuade the business stakeholders than would have been the case if he had been an outsider. This was because he shared the administrative identity with the business stakeholders in the university.
2	Stakeholder persuasion strategies (also see Section 4.4.3.2)	Persuasion through emphasising shared identity, where the 'business champions' encouraged administrative staff to accept the approaching implementation of the new system. This was achieved through the Business Heads, instead of project team members, chairing discussions where the Business Heads deliberately distanced from the Project and emphasised to the users their shared administrative membership.	To be able to persuade and engage business stakeholders, the 'business champions' had to emphasised their shared identity. Their shared administrative identity gave them the basis on which persuasion was effective.

3	Stakeholder persuasion strategies (also see Section 4.4.3.2)	(In relation to the ‘stakeholder conflicts’ episode 2) persuasion through emphasising shared identity, and through expertise, personality traits and communication style, where two persuasion activities took place. The first persuasion was the ‘academic champion’ persuading the Dean of the Research Division to meet with the third Project Director on the matter of the Research Division-project struggle. The second persuasion was the third Project Director persuading the Dean of the Research Division.	The ‘academic champion’ was able to persuade the Dean of the Research Division to come to the meeting with the third Project Director because the ‘academic champion’ shared the senior academic identity with the Dean.
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Table 5.1 Episodes where psychological group formation determined behaviours

As shown in Table 5.1, this research has found that people’s self-categorisations played an important role in forming groups. These were psychological groups that were not necessarily aligned with their job titles. In Episode 1 of *project team member conflicts*, for example, conflicts did happen within the BA team even though they shared the job title of ‘Business Analysts’. This is in line with Turner’s theory that people have a rough hierarchy of categories they belong to and which category becomes important depends on the particular situation.

Further, it was evident that, no matter inside or outside the SS project team, the psychological group difference and discrimination was the major factor of various human relational behaviours. Psychological group formation not only determined the issues that inhibited the implementation and institutionalisation of the project, but was also found to be a major basis of the human relational strategies that facilitated the project. This was presented in both intragroup influence (*acceptance of authority in project team* and *stakeholder persuasion strategies*) and intergroup conflicts (*project team member conflicts* and *stakeholder conflicts*).

However, it was revealed that psychological group formation was not necessarily the only source determining power-related behaviours. This finding answers the following subsidiary research question.

SRQ4: What is the nature of power? Does power emerge from only one source (psychological group formation), or does power emerge from other sources such as the several bases as French and Raven (1959) assert in their classic paper?

The answer to SRQ4 is that aside from psychological categorisation, there were other sources that gave people power. These sources include knowledge, expertise, communication skills, and personality traits, as shown in Table 5.2 below. This table includes the episodes in which these sources were found to determine power-related behaviours.

Episode No. (in the code)	Axial codes	Episodes where other factors determined power relational behaviours	Other factors that determined power relational behaviours
2	Project team member conflicts (also see Section 4.3.1.5)	Triangular power struggles occurred among the ex-business Assistant Project Director, the second Project Director, and the second Project Manager, where the Assistant Project Director was politically removed from the SS project. It was suggested that the reason behind this power struggle was that he had too much of the detail of the project process and this might reduce the power of the other two project leaders.	Knowledge
N/A	Ineffective stakeholder communications (also see Section 4.4.1.3)	The ineffective communication between the university senior management and the SS project was the inability to share the same background and language. This led to the lack of understanding, or even discrimination, of what the other party was speaking about, and thus constrained the communication between the two groups.	Terminology and language sharing

1	Challenging organisational hierarchy (also see Section 4.4.3.1)	(In relation to the ‘stakeholder conflicts’ episode 1) challenging organisational hierarchy facilitated the project, where the externally recruited project staff, particularly the third Project Director, challenged the organisational hierarchy. The externally recruited project specialists were less afraid to present the real picture of the project status to the university senior management than the ex-business project staff who naturally submitted to the organisational hierarchy.	Expertise
3	Stakeholder persuasion strategies (also see Section 4.4.3.2)	(In relation to the ‘stakeholder conflicts’ episode 2) persuasion through emphasising shared identity, and through expertise, personality traits and communication style, where two persuasion activities took place. The first persuasion was the ‘academic champion’ persuading the Dean of the Research Division to meet with the third Project Director on the matter of the Research Division-project struggle. The second persuasion was the third Project Director persuading the Dean of the Research Division.	Expertise, communication skills, and personality traits

Table 5.2 Summary of other determinants of power relational behaviours

Expertise was discovered to be an important source of power that enabled the progress of the SS project, as shown in the first episode of ‘*challenging organisational hierarchy*’ and the third episode of ‘*stakeholder persuasion strategies*’. In the first episode of ‘*challenging organisational hierarchy*’, the externally recruited project specialists, particularly the third Project Director, challenged the organisational hierarchy and reported the whole story to the university senior management. In the third episode of ‘*stakeholder persuasion strategies*’, the third Project Director managed to persuade the Dean of the Research Division in the meetings arranged by the academic negotiator. Both episodes showed that the senior executives and senior

managers in the university were persuaded by the third Project Director because of the third Project Director's expertise and experience in managing big IT projects.

However, Turner's (2005) theory seems to fail to explain this human relational transformation from antagonism to trust and collaboration. Since the university senior management and the third Project Director would usually categorise themselves in different psychological groups, the single lens relying on social group identity seems to be inadequate in explaining the reason behind the senior executives' attitude change; that is, why did the senior executives agree with the third Project Director since they were not likely sharing the same group identity? Clearly, the third Project Director gained some form of power after successfully challenging the organisational hierarchy and after persuading the senior executives. Thus, Turner's (2005) theory does not deliver an explanation of such power change and how this flows from group identity or membership sharing. This gap of understanding may be supplemented by French and Raven's (1959) 'expert power' or 'informational power' by Deutsch and Gerard (1955) where the power source and target need not be members of a group. Indeed, a senior executive in the case study noted that, it was a difficult decision for them to make between the CIO and the third Project Director but they finally chose to support the Project Director because of her expertise and knowledge in project management.

Similar to the expertise and informational power, sharing the same technical language and terminology also affected behaviours, which was evident in the communication issues between the university senior management and the SS project. Because the senior management found it hard to share the technical languages and concepts with the SS project team members, the communication between them was hindered. This was among the reasons why the senior management made multiple replacements of the project leaders without diagnosing the real project issues; the ineffective communication between the two groups led to senior management being uncertain of 'who to trust' and 'who to fire'. On the other hand, the SS project staff found it hard to share language with the senior academics without having particular higher education qualifications. These findings portray that shared identity was not necessarily the only basis of psychological group formation. Shared language and terminology also

determined the formation of psychological groups, and thus the relevant human behaviours. This finding is consistent with Foucault's (1977) perspective that the terminology and the language of project management is not only a body of knowledge but also a discipline in the control and power sense that may cause tensions between project practitioners and project participants (Hodgson, 2002).

In the second episode of '*project team member conflicts*', knowledge was also found to be a source of power. The Assistant Project Director suggested that his knowledge of the processes in the university and in the SS project made him a power threat to the other two project leaders. Foucault (1977) offers an explanation of the power-knowledge relationship; Foucault sees knowledge, not in terms of truth and falsity, but in terms of enabling disciplinary power. This perspective allows the understanding of how 'knowing too much' could become the source of a power threat. Turner's theoretical lens, however, does not draw particular attention to the aspects of information, expertise and knowledge. One may argue that these aspects could be seen as some form of resource. In this light, Turner does provide explanation of how resources relate to power. In Turner's theory, resources were seen as the result of power, not the source. However, it was evident in the findings that the acquisition of information, expertise and knowledge was among the factors that determined power-related behaviours.

Another aspect of power nature, which Turner's theory appears to overlook, is related to personal factors that included communication tactics and personality traits. Turner and his colleagues focus more on the social group level of behaviours than interpersonal interactions, and as such, he does not draw particular attention to the aspects of personality or individual communications. Turner (1987b, p. 46) regards a single level of personal self-categorisation as less important than the social level in defining the self. Although most power strategies were found to be enabled by sharing an identity of a psychological group, communication tactics and personality traits emerging among the strategies indicates that Turner's theoretical lens seems to be unable to explain all the power relations surrounding the SS project. However, Yukl and his colleagues (Faeth, 2004, Yukl and Tracey, 1992, Yukl et al., 1993, Kipnis and

Schmidt, 1980, Yukl and Falbe, 1990, Kelman, 1958, Enns et al., 2003) carried out a notable set of social psychological studies concerning various personal determinants of power. Personality traits and communication skills were among these personal determinants of power (Anderson and Spataro, 2008, Keltner et al., 2003, Coats and Feldman, 1996). In the third episode of *'stakeholder persuasion strategies'*, the third Project Director's assertive personality and good communication skills complemented her expertise well. These personal strategies formed the basis of the trust and respect that she gained from the Dean of the Research Division.

As discussed above, it has been found that psychological group formation was a major factor that determined power-related behaviours (see Figure 5.2). Aside from this determinant; expertise, knowledge, shared (technical) language, personality traits and communication skills also appeared to be among the sources of power. Thus, if combining aspects of other social theories and studies, Turner's theoretical lens may provide a better understanding of the nature of power.

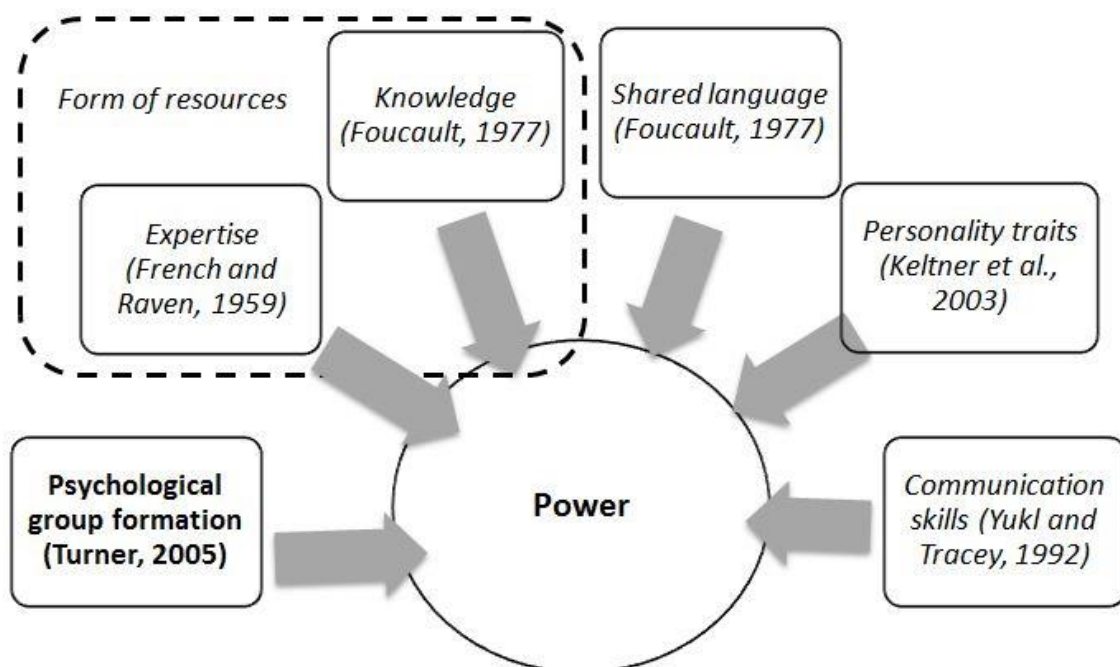


Figure 5.2 Discovered sources of power

The following sections will focus on the operation of power, further discuss how Turner's theory explains the different processes of how power was exercised, and how these power processes affected the progress of the SS project.

5.4.2. Principle Two of Turner's Theory

Psychological group formation produces a situation of mutual influence through a shared identity which forms the basis of power through persuasion.

The second principle concerns the first process of power in Turner's theory, that is power through persuasion. Turner (2005) argues that members of a psychological group have mutual influence on other members within their group. Based on the shared beliefs and norms that flow from the shared social identity, group members tend to find easier persuasion between their group members than between themselves and people in a different psychological group. This principle is associated with the first part of the seventh subsidiary research question.

SRQ7a: How is persuasive power gained and exercised in the management of IT projects?

The answer to SRQ7a is that persuasive power has found to be gained mostly by sharing the same social identity. Aside from a shared identity, persuasive power also came from expertise, communication tactics, and personality traits.

The three episodes in the axial code '*stakeholder persuasion strategies*' presented how these persuasion strategies were exercised in the SS project (see Section 4.4.3.2), as summarised in Table 5.3 below. These episodes indicated that Turner's theoretical lens has been useful in explaining most persuasion strategies in the SS project. Emphasising shared identity played an important role in persuading stakeholders to deal with communication issues and conflicts.

The fact that, as noted in the third episode, there were persuasive power strategies outside Turner's theoretical lens (i.e. expertise, personality traits and communication tactics) suggests the necessity of combining other social theories. The following

paragraphs will further discuss each episode of *stakeholder persuasion strategies* through Turner's theoretical lens and other social theories.

Episode No. (in the code)	Issues to deal with	Episodes of 'stakeholder persuasion strategies'	Factors that led to effective persuasion
1	Ineffective stakeholder communication	Persuasion through shared knowledge and background, where the first Project Director sought business engagement for requirement analyses. The administrative staff were willing to contribute to the project activities as they believed that the Project Director who was a previous administrator understood their world of view.	Shared psychological group identity
2	Ineffective stakeholder communication	Persuasion through emphasising shared identity, where the 'business champions' encouraged administrative staff to accept the approaching implementation of the new system. This was achieved through the Business Heads, instead of project team members, chairing discussions where the Business Heads deliberately distanced from the Project and emphasised to the users their shared administrative membership.	Shared psychological group identity
3	Stakeholder conflicts – Episode 2	Persuasion through emphasising shared identity, and through expertise, personality traits and communication style, where two persuasion activities took place. The first persuasion was the 'academic champion' persuading the Head of the Research Division to meet with the third Project Director on the matter of the Research Division-project struggle. The second persuasion was the third Project Director persuading the Dean of the Research Division.	Shared psychological group identity, expertise, personality traits and communication skills

Table 5.3 Episodes of 'stakeholder persuasion strategies'

SRQ5: Does an IT project leader gain influence over others in the project when they are in the same psychological group with the target(s)?

The answer to SRQ5 can be found in the first episode in Table 5.3, which is that an IT project leader can gain influence over others in the project when the project leader and the others mutually perceive a shared group identity. In the first episode as stated in Table 5.3, the project was initially managed by a senior administrative manager because he understood business requirements well and had influence in the university that allowed him to easily motivate other system users. His ability to influence flowed from his previous experience of working in the administrative area of the university, where shared group identity aided communicative and persuasive practices (Turner, 2005).

Similarly, the 'champion' strategies used in the second and the third episodes reflect Turner's notion of persuasion through the social identity approach (Tajfel and Turner, 1979, Turner et al., 1987). One can also interpret this phenomenon from Giddens' (1984) perspective in the way that, the administrative staff with the first Project Director, and the administrative staff with the Business Heads, taken together, as a distinct culture which had shared meanings that supported negotiation practices, and structures of signification were produced through the interpretive schemes held by them (Barrett and Walsham, 1995, Jones et al., 2004).

However, the fact that the SS project under the first Project Director's directorship was not making much progress indicate that, one person's influence apparently was not enough to get commitment of all levels of stakeholders in the university. Importantly, the first Project Director did not have professional project management expertise or experience in leading a complex project like SS prior to taking on the project. The finding that the third Project Director's expertise was a big enabler for the SS project suggests that, expertise is an important factor for delivering a successful project (Bussen and Myers, 1997, Grainger et al., 2009, Liebowitz, 1999, Oz and Sosik, 2000, Kappelman et al., 2006, Ye et al., 2015).

Moreover, personality and communication skills were uncovered to be important persuasion strategies. It has been discussed previously that Turner's theory does not draw particular attention to these interpersonal aspects, whereas Yukl and his colleagues (Faeth, 2004, Yukl and Tracey, 1992, Yukl et al., 1993, Kipnis and Schmidt,

1980, Yukl and Falbe, 1990, Kelman, 1958, Enns et al., 2003) address various personal determinants of power in their social psychological studies. As shown in the findings of the third episode in Table 5.3, the Dean of the Research Division indicated that he was impressed by the third Project Director's good communication skills and management style, and commented that it was the third Project Director's 'problem-solving mode' in her communication that made the persuasion effective. Interestingly, because of her personality and good communication style, the Dean of the Research Division viewed her differently from the 'ordinary' IT people whom the Dean did not share a common worldview with. Thus, it can be further inferred that personality traits and communication tactics seemed to affect psychological categorisations.

Furthering the discussion from the previous section, it can be concluded that psychological group formation was not only driven from shared group identity (marked in bold in Figure 5.3), but could also come from factors including shared language and terminology, communication tactics, and personality traits (marked in italics in Figure 5.3).

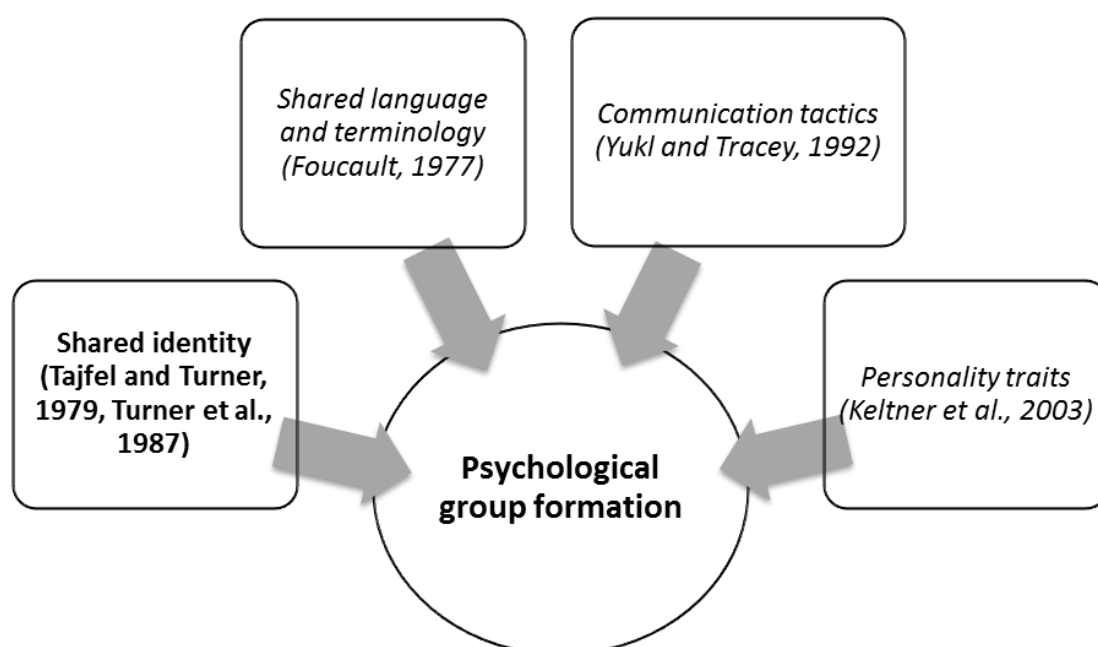


Figure 5.3 Discovered factors affecting psychological categorisations

5.4.3. Principle Three of Turner's Theory

Authority is the power based on in-group norms that group members ought to follow a specific person or position (leader) that has the right to control them in certain matters.

The third principle concerns the second process of power; authority is a process of influence that occurs within a psychological group whereby people accept the legitimate role of someone to make decisions on behalf of the group (Turner et al., 2008). This control only extends over matters relevant to the nature of the psychological group and its norms. For example if it is an IT project group, then the matters pertain mainly to the management of the project. This principle is relevant to the second part of the seventh subsidiary research question.

SRQ7b: What role does the power that emerges from legitimate authority play in the management of IT projects?

The answer to SRQ7b is that power that emerges from legitimate authority is driven from the voluntary submission to the group hierarchy. This submission to authority short-circuited the debates but facilitated the project. The axial code '*acceptance of authority in project team*' presented two episodes in which the acceptance of authority was a facilitator of the SS project (see Section 4.3.3.1), as summarised in Table 5.4 below.

Episode No. (in the code)	Issues to deal with	Episodes of 'acceptance of authority in project team'
1	Lack of project progress	Acceptance of authority, where the first Project Director accepted the formal legitimization of the Steering Committee to make the decision of external review. This submission to authority conferred by the organisational and team hierarchy short-circuited the debates so as to help the Steering Committee be aware of the project status and make change to proceed.

2	Lack of project progress	Acceptance of authority, where the testing team project manager did not willingly agree with the deadline given by the third Project Director, and further, did not perceive the requirement as easy to meet. Even so, he accepted the mandate as he accepted the authority and the legitimate power of the third Project Director.
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Table 5.4 Episodes of ‘acceptance of authority in project team’

The first episode was about the first Project Director having to accept an independent review mandated by the SS Steering Committee. He noted that he would not accept the review easily if it was told by someone at his own level, and he agreed because he was submitting to the legitimate authority conferred by the project team hierarchy. This supports Turner’s (2005) notion of authority in the way that authority short-circuits the debates when a voluntary submission to the group norms or structure is taking place.

In the second episode, the researcher’s observation in a project meeting shows how a subordinate accepted a superior’s mandate unwillingly. However, it has been difficult to find a compelling explanation through Turner’s theoretical lens to determine whether a superior had power over a subordinate came from the superior’s legitimate authority conferred by organisational structure (Turner, 2005), or from the superior’s access or control of resources of the organisation (Clegg, 1989c, Foucault, 1979). It can be argued that there is a lack of consideration in Turner’s theory of how an established social structure involved with the differences in status, resources, and authority in the organisation or society affects power relations (Ye et al., 2014).

In the Three Circuits of Power Model, Clegg’s (1989c) dispositional power considers both the empowerment by the hierarchical position and by the control of resources. In Clegg’s terminology, taking the first episode for example, the power that the SS Steering Committee had was ‘the standing conditions’ given by the rules and organisational structure of the SS project team, and meanwhile, stemmed from the SS Steering Committee’s controlling of the Project Director’s salary and the project funding that the Project Director needed.

5.4.4. Principle Four of Turner's Theory

Coercion is the power to control a target against their will through the deployment of resources to constrain and manipulate their behaviour.

The fourth principle of Turner's theory concerns the third power process – coercion. According to Turner's (2005) theory, coercion flows from intergroup discrimination. It is where neither persuasion nor legitimate authority is effectual, but people force others to do things anyway, somehow in an illegitimate way. This principle is associated with the third part of the seventh subsidiary research question.

SRQ7c: What role does coercive power play in the management of IT projects?

The answer to SRQ7c is that coercion tends to occur between people who do not psychologically identify with each other. Exercising coercive power requires the control of some form of resources that others desire. These coercive actions were presented in the various intra-project-team and inter-stakeholder-group conflicts that emerged from the data, as summarised in Table 5.5. These conflicts involving coercion were among the factors negatively affecting the SS project.

Episode No. (in the code)	Axial codes	Episodes of 'project team member conflicts' and 'stakeholder conflicts' in which coercion occurred
1	Project team member conflicts (also see Section 4.3.1.5)	Hostile sentiments and covert resistance, where conflicts occurred between ex-business BAs and externally recruited BAs, and at a higher level, between ex-business project staff and the project leaders' external recruits. As a consequence, the externally recruited BAs were isolated by the ex-business BAs from the key discussions with the business group. The issues raised by the ex-business BAs seemed to be ignored by the project leaders as they only listened to their external recruits. The lack of effective communication then caused the ex-business BAs' covert resistance.

2	Project team member conflicts (also see Section 4.3.1.5)	Triangular power struggles occurred among the ex-business Assistant Project Director, the second Project Director, and the second Project Manager, where the Assistant Project Director was politically removed from the SS project. It was suggested that the reason behind this power struggle was that he had too much of the detail of the project process and this might reduce the power of the other two project leaders.
1	Stakeholder conflicts (also see Section 4.4.1.4)	Coercion triggered overt resistance, where university senior management brought considerable pressure to bear on the third Project Director insisting that she meet a deadline that the senior management wanted to accept. This act of coercion failed after the CIO having to leave the university as the Project Director overtly and strongly resisted to, what she believed, the unattainable deadline. The Project Director then quickly gained control of authoritative resources, time, and funding.

Table 5.5 Episodes in which coercion occurred

In the two episodes of '*project team member conflicts*', the occurrence of antagonistic conflicts within the project team, and further within the project leader group and inside BA team, was an important factor limiting the project progress. Turner's (2005) lens allows the understanding and interpretation of such phenomena from the perspective of psychological group formation, thus explains coherently how self-categorisations affected group behaviours, in particular, power conflicts. This may be found difficult in the case of Foucault (1980) and Giddens (1984) where a broader and more societal focus often seems apparent. Although Lukes' second dimension of power similarly concerns the situation where the powerful controls what and who are included in discussion and debates in order to keep issues out of the political process (Howcroft and Light, 2006), it does not give a clear analysis of the source of power and thus omits a number of structural elements that can be utilised by practitioners in setting up IT projects (Ye et al., 2014).

In the first episode of '*stakeholder conflicts*', as the Vice Chancellor and his executive team had influence and authority on the CIO, the CIO was acting as their coercive agent, or in Turner's (2005) terminology, a 'willing executioner'. The third Project Director saw the action of the CIO as coercion. She was threatened by the CIO that she

would be demoted if she did not accept the mandated deadline. The CIO's failure in exerting power over the third Project Director, and the third Project Director's interpretation of the situation, support Turner's perspective of coercion. The third Project Director was not easily persuaded by the CIO because she did not feel the CIO shared her identity as a professional IT project manager, and further, she did not feel the CIO had the legitimate right to demand such an unrealistic and unreasonable deadline. Indeed she described the CIO as someone with very little experience of business transformation projects like SS. The Project Director's identity as a highly professional IT project manager was more important to her than her current job as the new SS Project Director.

Further, this episode also illustrates the relationship between power and control of resources, which supports Turner's (2005) perspective that power led to control of resources. The CIO had control of resources that were important to the third Project Director, both human and material. The Project Director reported to him and in that sense he controlled her salary, but he could not exert power over her because she did not view the CIO as sharing her identity as a professional project manager, which was important to her. In this episode, it was evident that the basis of power was not the control of resources, but more reasonably, shared social identity. Hence, the control of resources, as Turner (2005) argues, seemed to be the result of having power, and indeed could be used to cement or entrench power, but it was not the fundamental basis or source of power.

As SRQ7a, SRQ7b and SRQ7c have been answered in the above sections, the seventh subsidiary research question is answered accordingly.

SRQ7: Does power consist of persuasion, authority and coercion? Is power applied through processes of persuasion, authority and coercion and what is the nature of these processes?

Therefore, the answer to SRQ7 is that persuasion, authority and coercion have been found to be the different types of power. In the SS project, power was applied through persuasion, authority or coercion, depending on whether or not the agent shares a

group identity with the target. It has been found that the nature or condition of these processes was mostly sharing a group identity, but also including the acquisition of expertise, communication skills, or good personality traits.

5.4.5. Principle Five of Turner's Theory

Resistance can be understood as a response to perceived coercion to an extent or a perceived threat to the psychological group identity that people wish to retain.

The last principle of Turner's theory is around resistance behaviours. Resistance is a term with wide set of meanings and instances – it refers to everything that workers do which managers do not want them to do, and that workers do not do that which managers wish them to do; it can be taken in both collective and individual actions; it can be the actions specifically designed to thwart management and those who just take absenteeism (Davidson, 1994).

It is argued in Turner's theory that coercion tends to generate mistrust in the targets, provoke resistance behaviours and, and weaken the possibilities of the future use of persuasion and authority (Kramer, 1999, Turner, 2005). This perspective shares similarity with Critical Theory which suggests that workplace resistance seeks to challenge, disrupt or invert prevailing assumptions, discourses, and power relations (Collinson, 1994). In this regard, resistance may constitute a form of power exercised by subordinates in the workplace who resist even though they may never think of the future consequences with their insecure organisational positions. This principle is associated with the eighth subsidiary research question.

<i>SRQ8: Does Turner's theory give a reasonable explanation for the phenomenon of resistance behaviours involved in IT projects?</i>
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The answer to SRQ8 is that Turner's theory has been found generally useful for explaining the phenomenon of resistance behaviours involved in the SS project because it was revealed that both overt and covert resistance to power did occur when coercion was perceived to some extent. However, Turner (2005) only provides a

general description of the power-resistance relationship and a more detailed explanation requires the combination of the work of other social theorists.

In Table 5.6, two episodes have been highlighted in relation to resistance behaviours in the SS project. The following paragraphs will further discuss the answer to SRQ8 through the interpretation around these episodes.

Episode No. (in the code)	Axial codes	Episodes of 'project team member conflicts' and 'stakeholder conflicts' in which resistance occurred
1	Project team member conflicts (also see Section 4.3.1.5)	Hostile sentiments and covert resistance, where conflicts occurred between ex-business BAs and externally recruited BAs, and at a higher level, between ex-business project staff and the project leaders' external recruits. As a consequence, the externally recruited BAs were isolated by the ex-business BAs from the key discussions with the business group. The issues raised by the ex-business BAs seemed to be ignored by the project leaders as they only listened to their external recruits. The lack of effective communication then caused the ex-business BAs' covert resistance.
1	Stakeholder conflicts (also see Section 4.4.1.4)	Coercion triggered overt resistance, where university senior management brought considerable pressure to bear on the third Project Director insisting that she meet a deadline that the senior management wanted to accept. This act of coercion failed after the CIO having to leave the university as the Project Director overtly and strongly resisted to, what she believed, the unattainable deadline. The Project Director then quickly gained control of authoritative resources, time, and funding.

Table 5.6 Episodes in which resistance occurred

In the first episode of '*project team member conflicts*', when the ex-business BAs felt undervalued, and then were not supported by the second Project Director, the second Project Manager and their externally recruited group, they conducted covert resistance as they believed they were right in this matter. The ex-business BAs did not follow the Project Manager's instruction of going back to the business stakeholders' working group for discussion on the same matter. This was because they believed that was not worth doing since they kept getting the same answer from the business stakeholders. Further, the ex-business BAs did not feel they could influence the Project

Manager and her psychological group, and thus they chose the passive way of resistance. The findings of this episode are in agreement with Turner's perspective that intergroup conflicts may lead to coercive behaviours, which in turn, may cause resistance.

However, Turner's theoretical lens only provides a general explanation of the coercion-resistance relationship. A more thorough understanding is required by using other social theorists' work. Interestingly, Rusaw (2000) offers a fascinating description of different views on organisational change from different levels of people in organisations. Top-level managers, she argues, hold the prevailing ideology and fortify the status quo by controlling resource allocations, remuneration, and organisational politics. Middle-level managers, who are between upper-level powers and employee-dissatisfaction, may side with executives to protect themselves. However, Rusaw (2000) argues, low-level employees feel powerless with limited choices and may have to accept decisions passively or quit. This picture of the origin and nature of resistance based on different perspectives of groups in organisations provides a good theoretical support for the interpretation of the first episode of *'project team member conflicts'*.

Indeed, a major factor of the second Project Manager not supporting the ex-business BAs when they raised the scope-extension issue was the pressure of the budget and timeline. Under this pressure, the second Project Director and the second Project Manager were frustrated and reluctant to raise a scope-extension issue up to the senior management of the university as they knew that a scope issue would lead to the requirement of additional project funding. This frustration came from the fact that the university senior management had explicitly expressed a 'not-another-penny' attitude. In this situation, the ex-business BAs did feel powerless with limited choices provided by the second Project Manager, and had to work around possible solutions passively, and they eventually quit.

In the first episode of *'stakeholder conflicts'*, overt resistance was conducted. The third Project Director's resistance to the CIO and the university senior management turned out to be a significant factor facilitating the project as she and her externally recruited project staff members challenged the organisational hierarchy. Different from the ex-

business project staff who were submissive to the organisational hierarchy and tended to convey better-than-real news, the third Project Director succeeded in resisting the organisational hierarchy based on her professional knowledge, expertise and experience in IT projects. She walked out of the job to defend her judgement of the project status and her estimation of the budget and timeline. The interesting finding is that this resistance behaviour was discovered to be a significant facilitator for the SS project. This is consistent with the extant literature that proposes the positive perspective of resistance as facilitative resource assisting organisational change (Thomas and Hardy, 2011, Thomas et al., 2011, Ford et al., 2008, Ashforth and Mael, 1998, Markus, 1983).

5.4.6. Augmented Three-Process Theory of Power

Following from the answers to the subsidiary research questions discussed above, this section will provide the answer to the overarching research question as shown below.

RQ: What level of understanding and what insights are provided by using Turner's Three-Process Theory of Power as a theoretical lens to investigate power relations in IT Projects?

The answer to RQ is that Turner's Three-Process Theory of Power provides a useful theoretical lens to investigate and explain most power relational activities in the SS project. However, some alternative factors as determinants of power-related behaviours were discovered to be important, and as such, they need to be conceptualised and integrated into the understanding of power. Therefore, a conclusion is that a more thorough understanding can be gained when Turner's theory is combined with some aspects of other relevant theories, and with some aspects related to personal characteristics and influence tactics.

Indeed, the failure to find strong support for a social-group-identity-and-power link reflects the importance of considering other determinants of power outside the social identity approach (Tajfel and Turner, 1979, Turner et al., 1987). Based on the findings discussed above, opportunities of augmenting Three-Process Theory of Power have

been found for a more thorough understanding of the nature and the operation of power. An extended Three-Process Theory of Power is shown in Figure 5.4 below, and will be explained in the following paragraphs.

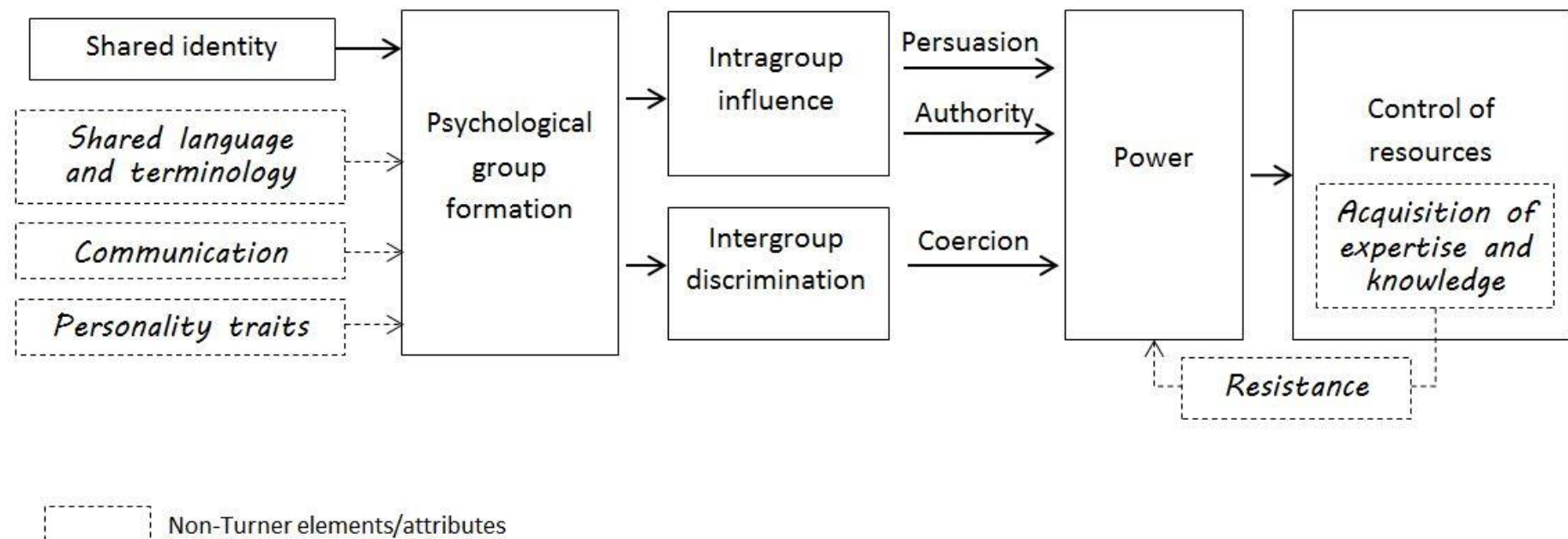


Figure 5.4 Augmented Three-Process Theory of Power

As a by-product of the knowledge gained from this research, Turner's (2005) theory is augmented by including the components marked in dotted boxes in Figure 5.4. As illustrated in this diagram, the augmentations consist of two major parts: around the determinants of psychological group formation and around the power-resource causal relationship. The following paragraphs will discuss these two major parts of augmentations in turn.

The above discussion, particularly the discussion in Section 5.4.2, has outlined a number of factors that affected psychological categorisations in the SS project, which in turn affected power relational behaviours (also see Figure 5.3). In addition to shared social group identity, it is useful to consider alternative factors that have been found important in affecting how people identify with each other psychologically. These alternative factors are:

- shared technical language and terminology (Foucault, 1977, Reinhard and Bigueti, 2013, Nahapiet and Ghoshal, 1998, Preston and Karahana, 2009);
- communication tactics (Keltner et al., 2003, Yukl and Tracey, 1992, Yukl et al., 1993, Kipnis and Schmidt, 1980, Yukl and Falbe, 1990, Kelman, 1958); and
- personality traits (Anderson and Spataro, 2008, Keltner et al., 2003, Coats and Feldman, 1996, Enns et al., 2003, Enns et al., 2001).

In line with the extant literature, it has been revealed that sharing technical language and terminology, being skilful in communication, and/or having matched personality could lead to the tendency of people identifying with each other into the same psychological group. The discussion in Section 5.4.2 indicates that interpersonal aspects including effective communication skills and personality traits had some role in making the change recipient (e.g. the Dean of the Research Division in the third episode in Table 5.3) feel he was in the same psychological group with the change agent (e.g. the third Project Director), which made the intragroup persuasion effective. The findings also suggest that this categorisation does not need to rely on sharing work-based identity or sharing similar social background. Indeed, in the extant literature there are studies on persuasive strategies that do not rely on work-based

categorisation or hierarchical authority (Cohen and Bradford, 2005). Judge and Piccolo's (2004) notion of transformational and transactional leadership, which has proven to be particularly popular in studies of IT project leadership (Neufeld et al., 2007, Bennett, 2009), could also provide useful insights into communication tactics (i.e. inspirational communication) and personality traits (i.e. personal recognition), in terms of how leaders persuade and motivate their IT employees to reach their maximum potential (Bennett, 2009). Therefore, adding these alternative determinants of psychological group formation to Turner's theory furthers the understanding of social categorisation (Turner, 1978a, Tajfel et al., 1971, Tajfel, 1972, Sachdev and Bourhis, 1985, Turner, 1985) and the understanding of the nature of power (Simon and Oakes, 2006, Turner, 2005).

With regard to power and resources, Turner's theory highlights the one-way causality of power to the creation and control of resources. As discussed in Section 5.4.4, the findings support Turner's argument by demonstrating that controlling resources could not necessarily lead to effective power exercise, and gaining power did lead to the creation and control of resources. However, the discussion in Section 5.4.1 (including Figure 5.2) and Section 5.4.5 indicates that the acquisition of expertise and knowledge were found to be the reasons that people could successfully challenge power. If one views expertise and knowledge as some form of resources, it can be argued that the control of resources may lead to power, in particular, through resistance to gain expert power (French and Raven, 1959) or informational power (Deutsch and Gerard, 1955). Thus, the acquisition of expertise and knowledge, regarded as part of resources, has been included in the construction of the augmented theory as the basis of resistance to power (see Figure 5.4).

To summarise, Turner's perspective (2005, 1987b) is mostly eloquent in demonstrating how social influence and power can be gained and exercised, and specifically, how social group identities affect people's categorisation of psychological groups which determines different ways of power exercises that people resort to. Turner's (2005) theory has shown to be a useful theoretical lens for understanding power and power relations. This theoretical lens covers a wide range of aspects of power:

- the nature and sources of power (psychological group formation based on shared social group identity);
- the operation of power or different types of power exercises (three processes – persuasion, authority and coercion);
- the effects of power exercises (the power-to-resource causality); and
- the power-resistance relationship (the perception of coercive power tends to provoke resistance behaviours).

However, it is useful to consider the alternative factors contributing to the understanding of power. The Three-Process Theory of Power has been extended by including the discovered alternative determinants of social categorisation and the causal relationship of the acquisition of resources (expertise and knowledge) to power through resistance. The alternative determinants together with the basis of social group identity, and the extended power-resource explanation, have been found to contribute to the formation of psychological groups, and to the prediction of behaviours, thereby improving the explanatory power of the Three-Process Theory.

5.5. CHAPTER SUMMARY

This chapter has presented the discussion and further interpretation of the initial findings presented in Chapter 4. By answering the research question and subsidiary research questions, this chapter has found that a more thorough understanding comes when Turner's theory is combined with some aspects of other relevant theories, and with some aspects related to personal characteristics and influence tactics. An augmented Three-Process Theory of Power has been presented based on the interpretation of the findings.

The final chapter of this thesis outlines the conclusions of this research.

CHAPTER SIX

CONCLUSION

6. CHAPTER SIX – CONCLUSION

6.1. INTRODUCTION

The final chapter provides a summary of the research process and the findings that have been developed. Additionally, it discusses the contributions to knowledge this research has made and the limitations of this research, and suggests future research directions in this area. The chapter is structured into the following sections:

- Section 6.2 provides a summary of the research findings, discussing the answers to the research question and subsidiary research questions.
- Section 6.3 summarises the contributions to the Information Systems (IS) discipline at three different levels: theoretical, methodological and practical.
- Section 6.4 addresses the limitations of the research concerning the scope of the research, sensitivity of the research topic, the researcher bias and the lack of generalisability.
- Section 6.5 indicates areas for future research directions.
- Section 6.6 provides a summary of this research.

6.2. SUMMARY OF THE RESEARCH

This section provides a summary of the research process that was presented in Chapter 2 and Chapter 3, and the findings that were presented in Chapter 4 and Chapter 5. The aim of this research was to explore of the value of Turner's Three-Process Theory of Power in the context of Information Technology (IT) projects in which information systems are implemented in contemporary organisations. To achieve this aim, this research investigated the power relations surrounding an IS implementation and institutionalisation within a university. These power relations included the relationship of the project team to other various project stakeholders and the various human relations within the project team. The research study has answered the research question as shown below.

What level of understanding and what insights are provided by using Turner's Three-Process Theory of Power as a theoretical lens to investigate power relations in IT Projects?

This research has found that Turner's Three-Process Theory of Power is a useful theoretical lens for studying the nature and the operation of power. However, a more thorough understanding of power can be gained when Turner's Three-Process Theory of Power is combined with other social theories and extant literature. As a result of the research process, an augmented Three-Process Theory of Power has been developed by adding alternative components that emerged from data in the case study in relation to the understanding of power.

Throughout the undertaking of an iterative process of data collection and analysis of qualitative data, two themes together with their sub-themes and codes were identified in order to answer the subsidiary research questions which then further, answered the overarching research question. The two themes were:

- Human Relational Factors Affecting the Project, and
- Non-Human-Relational Factors Affecting the Project.

The emergence of both human relational and non-human-relational factors broadens the understanding of IS implementation and institutionalisation. The case study findings also suggest that human relational factors, particularly power relational issues, played a much larger part than non-human-relational factors in affecting the Student System (SS) project. This finding further underlines the importance of paying particular attention to power-related and political issues during IS implementation and institutionalisation projects.

6.3. RESEARCH CONTRIBUTIONS

This section reflects on the contributions this research has made to IS knowledge by exploring the implementation of an information system that managed student information covering various business areas in a university. The case study investigated all the factors affecting the implementation and institutionalisation of the system with a particular focus on power and social group related behaviours. The contribution to knowledge is presented at three levels: theoretical, methodological and practical.

6.3.1. The Theoretical Level

At a theoretical level this research has highlighted that the application of the social psychological theory – Turner’s Three-Process Theory of Power – to the IS case study has discovered usefulness in explaining behaviours around gaining and exercising power. This research has additionally demonstrated that there were alternative sources of power and additional aspects of power-resource links affecting the IS implementation process which Turner’s theoretical lens does not cover. By applying and augmenting the social psychological framework, this research has built a deeper theoretical understanding of power relations in IT projects. This understanding was not only limited to the relations between project stakeholders; it also included the intra-project team relations.

Therefore, a major theoretical contribution of this research is the introduction of a more tangible and detailed analysis through the social identity approach (Tajfel and Turner, 1979, Turner et al., 1987) for understanding and explaining the nature of

power which has been proven useful in similar research (Schwarz and Watson, 2005; van Dijk and van Dick, 2009; Tansley et al., 2013). Turner's (2005) theoretical lens formed a basis for understanding the inter- and intra-group phenomena and highlighting the thinking and action of individuals such as how the 'change champions' made possible collective products through psychological processes to facilitate the IS implementation and institutionalisation.

It is worth noting that another contribution is to Turner's Three-Process Theory of Power itself. By addressing the gap in the findings where Turner's concepts do not seem to be useful for the explanation of some phenomena, this research contributes to Turner's theory, and to the IS discipline, by associating together the traditional theoretical views of power. In the augmented Three-Process Theory of Power, the alternative determinants together with the extended power-resource explanation, contribute to the understanding of social categorisation and power relations, and to the prediction of behaviours, thereby improving the explanatory power of Turner's theory.

6.3.2. The Methodological Level

At a methodological level the design of this research has demonstrated the value of an interpretivistic case study approach through comprehensive Grounded Theory based inductive analysis for understanding power. This is important to Turner's (2005) Three-Process Theory of Power, and Turner and his colleagues' social identity approach (Tajfel and Turner, 1979, Turner et al., 1987), because although positivist experimental and survey approaches have been shown to be particularly useful in searching for cause and effect relationships as the basis of theory development and testing (Dube and Pare, 2003), they may not adequately consider Turner's constructs due to a comparative lack of ecological validity (Bronfenbrenner, 1979). The direct approach of an interpretivist case study, however, has been able to enhance ecological validity as it focuses on real life issues (Darke et al., 1998) allowing the researcher to learn about the everyday activities and beliefs of group members in the context of applying Turner's theoretical framework.

Thus, this research contributes to Turner's theory by applying it in a real-world case study involving complex human relations and consequences of decision making, whereas the other social science research using this theory is commonly conducted by psychological experiments (Wenzel and Jobling, 2006, Willis et al., 2010, Fritsche et al., 2013), which tend to provide ready-made and post hoc findings since there is no natural social structure or history and there are no real consequences that flow in real situations. The interpretation of this research allowed the comprehensive understanding of the deep structure of phenomena (Orlikowski and Baroudi, 1991) as well as a focus on natural social structure (Levitt and List, 2007), culture, and historical context (Darke et al., 1998).

As Turner's theory is relatively new and few similar studies exist, this research provides rich insights into the difficulties with the application of this theoretical lens. This novel research, in terms of the theory and the context, has illustrated a solution for coping with the difficulties in applying this theoretical lens thereby guiding future work.

6.3.3. The Practical Level

In practical terms, this research adds to knowledge concerning project management, in particular, concerning the effective management of power relations in IT projects. Based on the findings discussed in Chapter 4 and Chapter 5, Table 6.1 below outlines the specific guidelines for IT project managers or systems implementers.

	Human relational guidelines	Non-human-relational guidelines
Do's	<ul style="list-style-type: none"> • Emphasising possible shared membership for persuasion • Sharing terminology and language for persuasion • Influencing with expertise • Respecting and gaining trust • Developing extrovert personality and good social skills • Giving authoritative direction when necessary • Avoiding over-submission to organisational hierarchy 	<ul style="list-style-type: none"> • Having strong project management discipline • Resourcing experienced project expertise • Estimating and planning project accurately • Considering potential uniqueness of organisational requirements and culture
Don'ts	<ul style="list-style-type: none"> • Ineffective communications • Having hands-off management style • Ineffective leadership or giving little support to project staff • Changing project team structure or reporting lines frequently • Coercing for dealing with conflicts • Overly submissive to organisational hierarchy 	<ul style="list-style-type: none"> • Lacking project management discipline • Having insufficient project expertise or experience in the team • Underestimating project scope, resources required or potential risks • Changing decision or direction frequently • Overlooking organisational culture or particular user requirements

Table 6.1 Guidelines for IT project managers

These guidelines include the do's and don'ts of project managers' ways to persuade and to overcome political and non-political issues during IS implementations. These recommendations will indicate to IS theoreticians and practitioners what constitutes effective and ethical management of power relations, as well as non-human-relational aspects, in IS implementation projects.

6.4. RESEARCH LIMITATIONS

This section presents the limitations of this research. The limitations of this research include the scope of the research, the sensitivity of the research topic, the researcher bias and the lack of generalisability.

6.4.1. Scope of the Research

The research was conducted in a single case study based on one higher education institution. Thus the findings could be limited by focusing on one organisation and a certain era in time. The research has not presented views from all project stakeholders. Due to the high turnover of the university and project staff and the long history of the project being studied, a number of potential participants left the university and could not be contacted. While the longitudinal data collection provided the researcher with sufficient data to produce lessons for implementing the new system at AsiaPac University, the research did not provide a comparison with other higher education institutions. Insight may have been gained through such a comparison. This could be a basis for future research.

The theoretical lens that this research applied was mainly based on a single social psychological theory. This meant the scope of the research might be limited by the single theoretical lens. However, the reason that the research applied a single theoretical lens was because a major objective of the research was to investigate the value of the social psychological theory. Further, the case study data were analysed not only through the social psychological theoretical lens, but also by combining the aspects of other social theories and extant literature. Therefore, the use of perspectives and aspects of other social theories complimented the investigated social psychological theory, enabling the research aims to be achieved.

The research case study was focused on one type of IT project only – the implementation of an off-the-shelf software product, which offered a limited scope. Given different types of IT projects have varied requirements on an IT project manager's competencies (Patanakul, 2011), future work can look into other types of IT

projects such as a system development project, which tends to focus on both processes (e.g. project methodologies) and outcomes (e.g. implementation).

Further, the practical guidelines for IT project managers outlined in Section 6.3.3 are rather general as a by-product of the knowledge gained from the current research. For example, the assumptions based around personality traits are somewhat weak; particularly considering personality traits were not ‘measured’. Nevertheless, these findings highlight the importance of further work in this area. For example, future work should aim to incorporate a survey approach to measure personality traits in order to tease out possible relationships between personality and IT project manager performance in managing project issues.

6.4.2. Sensitivity of the Research Topic

As power is a sensitive topic, not every stakeholder in this case study was willing to respond to every question. Thus a limitation needs to be noted in relation to the data collection aspect of the research, and particular ethical concerns involved in the interpretivistic approach adopted in the research. That is, more care was needed with regard to the rights and protection of the participants in interpretive research than most positivist research such as statistical experiments (Klein and Myers, 1999). In the current research therefore, the researcher had to be more vague about the details of participants and events than the researcher would have preferred, in order to maintain participants’ privacy and confidentiality.

Indeed, validating a social psychological theory like Turner’s (2005) was difficult because it was all about people’s perception. The researcher needed to really ‘get inside the participants’ heads’, making the data collection and analysis very challenging.

6.4.3. Researcher Bias

As indicated in Section 3.4, qualitative research, in particular interpretive research, by its nature, requires the researcher’s subjective understanding and interpretation of the

phenomena. In this light, the research to some extent could be influenced by the researcher, thereby creating bias (Golafshani, 2003).

In addition, bias could lie in the researcher's interpretation of data through the single theoretical lens. Interview questions were designed for the purpose of applying the theoretical lens. The researcher always attempted to understand and interpret the data firstly through Turner's (2005) theoretical lens, and if not found useful for explaining the phenomena, other perspectives of social theories were then applied.

To minimise the researcher's bias and influences, a number of tactics were employed. The two-phase data collection was one tactic. In the first phase of data collection, the researcher explored generally the issues and factors that inhibited the project progress rather than asking questions reflecting Turner's theoretical lens. Only after noting the emergence of aspects of Turner's theory from the preliminary data analysis, a more focused, theoretical informed approach was then conducted using Turner's theoretical lens to guide the second phase data collection.

Another tactic that was employed for minimising the researcher's bias and influences was the adoption of multiple sources of data collection, which has been underlined as a key strength of the case study method (Yin, 2009). It is also worth noting that the researcher acted as a complete (or non-participant) observer who intended to maintain a distance from the observed events, whereby avoiding influencing them.

Further, the Grounded Theory based iterative data analysis also helped reduce the effect of bias on this research. As outlined in Section 3.8 (particularly see Table 3.7), the application of Klein and Myers' evaluation criteria to the case study demonstrates how the researcher conducted the research in the way of attempting to minimise potential bias.

6.4.4. Lack of Generalisability

Based on a single case study and based on the nature of interpretive research, a limitation of the research is that it is difficult to generalise the research results, at least not in the scientific or positivistic sense (Benbasat et al., 1987, Yin, 1989, Yin, 2014).

However, the aim of this research is not to build a positivistic model with causal laws but to build a deep and rich understanding of the phenomena in question. Although the research findings are not easily generalisable to other IT projects, and are indeed specific to the SS project in AsiaPac University, this research provides some guidance with the findings presented on how project managers can manage power relational and non-power-relational issues for project progress.

As this research was carried out in the interpretivistic paradigm, it needs to be assessed by the criteria for rigour in interpretivistic research, namely credibility, transferability, dependability and confirmability (Lincoln and Guba, 1985, Guba and Lincoln, 1989). Among the criteria, the relevant interpretivistic criterion corresponding to generalisability is transferability. Thus, following the current underpinning philosophical stance in the interpretivistic paradigm, the findings of this research are not expected to be generalisable in a quantitative sense but are transferable so that similar patterns of behaviours can be learned. In order to allow transferability, this research has included detailed contextual information about the research field, and provided details of the participants' interpretations and relevant cultural information, so that it will be left to readers to decide on transferring the findings to other situations (Holloway, 1997).

6.5. POSSIBILITIES FOR FUTURE RESEARCH

There remain many possibilities for future research. This research provided an exploratory research study on the implementation and institutionalisation of an information system. The findings presented a series of human relational and non-human-relational factors that affected the system implementation and institutionalisation. Further work exploring the factors for the IS implementation success or failure at another point in the future would add depth to the research.

It is envisaged that future research could consider a different organisational context such as non-educational organisation or private business sector. Future work could thus investigate the factors affecting IS implementation within different organisational

cultures, and as such, the value of applying Turner's (2005) Three-Process Theory of Power could be further explored.

This research has augmented Turner's Three-Process Theory of Power based on the research findings. It is the researcher's intention to explore the extended Three-Process Theory in future research. Researchers are also positioned to take up the challenge of applying the augmented Three-Process Theory of Power for studying power in technology-based organisational change, or in a different research context.

As the interpretivist case study approach appears to be a useful way of exploring power issues and the value of Turner's theoretical lens, further research concerning political issues in a single organisation may benefit from adopting a similar method. Nevertheless, future research exploring power relations may find that a better understanding might be gained when a combined method is used. A combined approach for example, may enable both an in-depth understanding of the power interplays in particular political events, as well as the exploration of possible causal relationships between participants' social or work-based identities and their power behaviours (Turner, 2005).

Though the case study utilised in this thesis appears to be an appropriate method for exploring power issues through Turner's lens, a direct comparison between the interpretivist case study approach and a positivist experimental or survey approach (perhaps similar to those used by Turner and his colleagues in the past), would help to verify the practicality of the case study approach.

This research also produced the practical guidelines for IT project managers or systems implementers. It is anticipated that these recommendations would make a valuable contribution for future research in this area.

6.6. SUMMARY

This thesis aims to explore the value of Turner's (2005) Three-Process Theory of Power in understanding power and power relations in IT projects, and to investigate the

factors, particular power relational factors, affecting the IS implementation and institutionalisation process. This research has provided insights into the understanding of power related behaviours in IT projects, and produced practical guidelines for IT project managers and system implementers in setting up and managing IT projects. The research findings have demonstrated the usefulness of Turner's (2005) Three-Process Theory of Power together with the social identity approach (Tajfel and Turner, 1979, Turner et al., 1987) for understanding and explaining power. In spite of that, this research addressed the gap in the findings where Turner's concepts do not seem to be useful for the explanation of some phenomena, and augmented Turner's theory for a more thorough understanding of power and power relations.

In summary, the thesis has provided contributions to the IS discipline at the theoretical, methodological and practical level. At the theoretical level, the research contributes to the IS discipline by introducing IS audiences to a new and useful theoretical framework, and further a potentially more thorough framework of studying power. Thus, this research has built a deep theoretical understanding of power and power relations in IT projects. At the methodological level, the research contributes to Turner's theory by applying it in a real-world case study involving complex human relations, whereas the other social science research using this theory has been commonly conducted by psychological experiments (Wenzel and Jobling, 2006, Willis et al., 2010, Fritsche et al., 2013), which tend to provide ready-made and post hoc findings. At the practical level, the research has produced guidelines for project practitioners and added to the knowledge concerning project management, in particular concerning the effective management of power relations in IT projects.

Overall, it has been a great pleasure and privilege to be permitted to study the SS project in AsiaPac University. The research findings are anticipated to assist organisations of similar structure that plan to implement and institutionalise information systems. In particular, the organisations that experience troubled system implementation due to power related issues may find this thesis helpful.

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APPENDIX 1 – PARTICIPANT DETAILS

Participants	Roles in SS Project	Immediate Group Memberships	Self-Categorisation Expressed in the Interview
SM1-5	University Senior Management		
SM1	Dean of Faculty	Academic administrator Senior manager at AsiaPac University Senior business stakeholder of SS Project Long-term university employee	N/A
SM2	Dean of Research Division	Academic administrator Senior manager at AsiaPac University Senior business stakeholder of SS Project Long-term university employee	<i>"I am not an IT type of person, and I also believe that most IT projects are heavily over-advertised by their advocates and nearly always come over budget, always under specifications, so I'm not actually a keen participant in such projects".</i>
SM3	Deputy Vice Chancellor for Education	Academic administrator Senior manager at AsiaPac University Senior business stakeholder of SS Project Long-term university employee	<i>"What's difficult to know is whether this is symptomatic, it's kind of a particular problem to [SS] or whether it's a general IT stuff, so I don't come from that sort of background at all. So what I did was work very close with Chief Operating Officer to appoint a pretty hard-nosed Project Director who replaced [the second Project Director]".</i>

SM4	Chief Operating Officer, only joined the university since December 2010	Non-academic administrator Senior manager at AsiaPac University Senior business stakeholder of SS Project Long-term university employee	<i>"I should point out I just came from another cooperation in the power industry where one of my responsibilities was managing an 18 million dollar SAP implementation, so I was the Director, but my portfolio included a lot of things. That was part of it. I did have flesh in my mind with good understanding of sort of the core issue, but again, it was high level. And I remember I was new into a role with a whole of other responsibilities as well and other issues which made it pretty challenging to be across the [SS] one".</i>
SM5	Associate Dean of Faculty & Chair of SS Management Committee	Academic administrator Senior manager at AsiaPac University Senior business stakeholder of SS Project Long-term university employee	<i>"You refer earlier to 'it's probably good you are a psychologist' but I think it's on my own personal attributes as well. I get along well with people. I get engaged with people, I can influence people, and I can do it in a number of ways either a friendly way or I can do it in an assertive way as well. I am quite capable of being assertive, that is not aggressive, that is assertive, and the distinction that we make in psychology about these two approaches".</i> <i>"Oh I become a negotiator. That is my role. I am negotiating our way through in an expeditious way, decisions that universities typically go at a glacial pace, and this project can't afford them to go at a glacial pace".</i>

BS1-6 University Business Stakeholders (administrators in various business and service areas at AsiaPac University)			
BS1	Business Lead, involved with the project since inception	Non-academic administrator Senior manager at AsiaPac University Business stakeholder of SS Project Long-term university employee	<i>"I guess I'm probably the fairly unique in terms of, because I'm actually not 'in' the project, I'm actually 'with' the project. Because my substantive position, my job is actually [a senior manager] in [Student Services Centre], so I'm in the business. Now, my role is very connected with the project, and I'm working very closely with change, but also leading the operational business area, so I'm sort of like the connector".</i>
BS2	Business Head of an area in the Student Services Centre	Non-academic administrator Middle manager at AsiaPac University Business stakeholder of SS Project Long-term university employee	<i>"I was very heavily involved and chairing a couple of working groups and all that type of stuff, very very hands on, very full on, very, (laughter) very time consuming. I had to be. I totally understand that, but it was a lot of work and a lot of pressure obviously. (...) We all had deadlines to meet. We all had our operational stuff that we had to do. We had all this [SS] stuff we had to do. We had to meet it by this day, da da da da..."</i>
BS3	Business Head of an area in the Student Services Centre	Non-academic administrator Senior manager at AsiaPac University Business stakeholder of SS Project Long-term university employee	<i>"I often get sent something which is anywhere between 5 and 80 page document and I have to read it, provide comment and sign off on it in two days. I got a job to do as well (laughter). I am not a [SS] Project staff member. So sometimes the timeframes around it are so unreasonable that the quality in the work is questionable".</i>

BS4	Business Head of an area in the Student Services Centre	Non-academic administrator Senior manager at AsiaPac University Business stakeholder of SS Project Long-term university employee	<i>"I was not in the project. I am not in the project, but I was in the business when [the first Project Director] was involved".</i>
BS5	Business Head of an area in the Student Services Centre	Non-academic administrator Senior manager at AsiaPac University Business stakeholder of SS Project Long-term university employee	<i>"Once I was appointed as the [Business Head] for the [business area], that came about because I have a very specific knowledge of the [business area] system. I've been involved in [the business area] for quite a while".</i>
BS6	Business Head of an area in the Student Services Centre	Non-academic administrator Senior manager at AsiaPac University Business stakeholder of SS Project Long-term university employee	<i>Telephone interview (not recorded)</i>
TM1-2 University IT Division Management Group (Chief Information Officer and the Associate Director in IT Division)			
TM1	Chief Information Officer, started leading SS project since October 2012 and left the university in February 2013	Non-academic administrator Senior manager at AsiaPac University Senior business stakeholder of SS Project Long-term university employee	N/A

TM2	Associate Director of IT Division	Non-academic administrator Senior manager at AsiaPac University Senior business stakeholder of SS Project Long-term university employee	<i>"I have nothing to do with [SS]. I am not in [SS]. (...) For a lot of people here including myself, we had many different jobs in many different organisations. And in my case, roughly half is commercial and half is government, federal government or state government, many different roles, you have a much broader view. And my view was that what they were building was very poorly built, so I unpacked the whole lot..."</i>
TO1-5 Transitional Support Group (recruited for the SS implementation)			
TO1	Transitional support staff for a business area	Non-academic administrator Contractor at AsiaPac University	<i>"Unlike most of the transitional officers, my role is really different. So I do programming. I do configuration. I do things in Unix. I do a lot more of the heavy lifting testing so I don't do user acceptance testing so much as the component testing. I work directly with the vendors. I've written business requirements for the [sub-systems], for components to be built for [a sub-system], things like that. (...) I don't know what the other transitional officers are working on. They are doing different stuff".</i>
TO2	Transitional support staff for a business area, recruited between October 2013 and October 2014	Non-academic administrator Contractor at AsiaPac University	<i>"I've been a student of the university so I understand the processes, which was actually very long time ago and I wasn't doing any student admin. (...) I don't have a technical background, so since they start asking me questions of technical issues, I said I had to go back to the [SS] Project and ask the people that are actually working in the testing area, working in the systems area, or working in the configuration area, or integration area, because that's not something I couldn't even fathom or comprehend".</i>

TO3	Transitional support staff for a business area but has a permanent position in the Student Services Centre, involved in SS Project since October 2012	Non-academic administrator Permanent university staff	<i>“Instead of being right back at the business and talking to people in the business there every day, now I need to make a contact with the business if I need to check things with them, but generally I don’t, because I’m a transition officer, because I know the business stuff already. I’ve got the knowledge”.</i>
TO4	Transitional support staff for a business area, involved in SS Project since January 2011	Non-academic administrator Contractor at AsiaPac University	<i>“My previous knowledge of working at university to be able to input into that as well, so that I could share the knowledge that I had, and so together we work with people from the project and obviously people from our team and people work in transitional and daily operational...”</i>
TO5	Transitional support staff for a business area since February 2014; previously working in the SS Training Team since December 2012	Non-academic administrator Contractor at AsiaPac University Professional trainer	<i>“I started in [SS] in December 2012 as a Training Developer. And then, in February this year (2014), I have won a partition as a transition officer through [Student Services Centre]. So I’m actually attached to [a faculty]. So I’m now on the other side of it. So it’s very interesting to actually see it from a different perspective: actually understanding more about how the university works, and knowing how that will interact. They’re actually saying how that affects individuals on a one-to-one basis. Working in project, it’s sort of more helicopter view and it isn’t really that interaction that will the understanding of what really goes on”.</i>

PL1-5 Project leaders (Project Directors and Project Managers, Assistant/Deputy Project Directors)			
PL1	First Project Director, involved within the project between 2006 (inception) and early 2011	SS project leader	<i>"I was the Project Director for all that period. (...) I hadn't been able to get the right level of project management to support me..."</i>
		Non-academic administrator	
		Senior manager at AsiaPac University	
		Senior business stakeholder of SS Project	
PL2	Assistant Project Director, involved within the project between 2006 (inception) and 2011	Long-term university employee	<i>"My original role going across into the project was to provide the business input into the project. (...) I think in me knowing was me having the knowledge that I had was probably the biggest, that's the reason why I'm not still there".</i>
		SS project leader	
		Non-academic administrator	
		Senior manager at AsiaPac University	
PL3	Second Project Director, involved within the project between March 2011 and June/July 2012	Senior business stakeholder of SS Project	N/A
		Long-term university employee	
		Previous Chief Executive Officer in external industry	
		SS project leader	
		Contractor at AsiaPac University	

PL4	Second Project Manager, holding the second Project Director's position until the third Project Director was appointed, involved within the project between April 2008 and late November 2012.	SS project leader Previous Business Analyst Long-term university employee who left the university after leaving the project	<i>"I was business analyst at the time (2010). (...) Myself is project manager".</i>
PL5	Third Project Director, involved within the project since late October 2012 until after the project go-live	SS project leader Professional IT project manager Contractor at AsiaPac University	<i>"Because I don't have a high education background, it's been very hard for me to understand a lot of the things they talk about in that [senior academic administrators'] group. (...) I'm here on my professional capability. I don't need this job if it's just a hiding to nowhere".</i>
PM1-8 Project Middle Management of SS Project			
PM1	Change consultant, involved within the project since July 2012	Professional project consultant Contractor at AsiaPac University	<i>"People on contract however are stuck in two games. One there, they answer to their line manager in their organisation whereas consultants tend not to. We are expected to bring a certain expertise, and... (So you are a consultant?) Yup. (...) A consultant says, 'I've got four clients this month, and I'm working with... Either I or somebody else in my team is out looking for the next work', so while it's convenient to milk any one client perhaps I don't have that embedded dependence on one client contractors are trapped in that game".</i>

PM2	Testing team leader (previously leading implementation), involved within the project between January 2013 and May 2013	Professional project consultant Contractor at AsiaPac University	<i>"I'm the [implementation lead], so I think the scope, my part of the project, I'm responsible for the testing, overall testing, the data conversion, the implementation and transition".</i>
PM3	Integration team leader, involved within the project since October 2011	IT technician Project specialist Contractor at AsiaPac University	<i>"I am a project manager, you know, that's what I am qualified in, so there is this kind of more technical stuff".</i>
PM4	Business Analyst team leader and later a senior project manager, involved within the project between November 2012 and April 2014	Professional business analyst Contractor at AsiaPac University	<i>"I joined in November last year (2012). This is what I do for living, student systems, implementations, business solutions, sort of architecture work in universities".</i>
PM5	Testing team leader, appointed after PM2 left	Project specialist Contractor at AsiaPac University	<i>"I've been in this industry for a very long time, so I do know how to deal with business. When I worked in [another state], I was the Director for Customer Engagement. I worked with the business to get them to use the technology, not go out to buy their own technology, to use what we had and be part of the bigger picture".</i>

PM6	Business Analyst team leader, involved within the project between November 2012 and June 2013	Professional IT project manager Project specialist Contractor at AsiaPac University	<i>"It could be easier for [PM4] to talk to business people because she had the previous experience in universities, but I've never been in one. And that's all just stakeholder management. [The senior management] who was the business people working on [one of the business areas] side, her first question to me was 'have you worked in a higher education'. There is nothing wrong with that, but it's more that they would have more confidence in you if you've got similar background, if you've got five degrees based on this (laughter)".s</i>
PM7	Communication Manager in SS Project, involved within the project since June 2012	Project specialist Contractor at AsiaPac University	<i>"My job was the Communication Manager and still is, but the role is now called the Stakeholder Engagement and Communications Coordinator. So the shift is a reflection of what the role should be doing. So we're looking for more stakeholder engagement rather than just communications".</i>
PM8	Data conversion team Leader, involved within the project since May 2011	IT technician Project specialist Contractor at AsiaPac University	<i>"I was put to [SS] when a recruitment agent asked whether I'm interested in a role. I was working in [another state] at the time. (...) I came to work on this project as the technical team leader for data conversion, and I've been the technical team lead data conversion ever since. (...) I'm not going to put my reputation at risk. I'm not going to my side of this project at risk, just because she wants to tick box. It's my name on it. It's my name against data conversion".</i>

BA1-8 Business Analysts in SS Project			
BA1	Business Analyst, seconded from the Student Services Centre into SS Project in July 2010 and left the university in November 2012	<p>Previous non-academic administrator</p> <p>Long-term university employee who left the university after leaving the project</p> <p>Ex-business Business Analyst in SS Project</p>	<p><i>"I was in the [Student Services Centre] working as a manager there before I worked in [SS project]. (...) I managed [some business areas] for university. I came from the background of being in the [Student Services Centre], now those Head positions. That's where I moved out of that into systems work, so I had a wealth of knowledge that I took with me, but I was the only one who came, and [BA2] from the [Research Division], came from the business, but we were also the only two people who owned permanent job in that project, so we didn't have a stress of contracts over our heads, but we were the only people who had that knowledge from that business".</i></p>
BA2	Business Analyst, seconded from the Research Division into SS Project, having dual roles – working for Research Division and SS project – until after resigning from Research Division in late May 2013	<p>Previous non-academic administrator</p> <p>Long-term university employee</p> <p>Ex-business Business Analyst in SS Project</p>	<p><i>"I actually have a desk down there, have a space down there in [Research Division], couple of days a week. So I have a desk up there (in SS Project) and a desk down there (in Research Division), but I was mainly up there (in SS Project). (...) Because I was reporting to [Research Division], I would give them (i.e. the project) the [Research Division] requirements, and I worked with the [two business areas] to get their requirements, merged things into a single application process".</i></p>

BA3	Business Analyst, recruited from an external specialist consultancy company, working for a business area	Professional business analyst Contractor at AsiaPac University Business analyst with IT background	<i>"I guess in my case I'm working in a more technical team, and I think our team is actually one of the most successful areas in [SS]. (...) Well, I'm sort of in the middle, so I guess my role is on the IT side, and just trying to meet their needs. I'm trying to sort of keep both sides happy, because I can relate to both I guess".</i>
BA4	Business Analyst, involved within the project since April 2012, working for a business area	Professional business analyst Contractor at AsiaPac University	<i>"I came on board as a Business Analyst and in the role there was a lot of work that, the work was basically broken up into streams of subjects within student system which is the main system that underpins [SS]. And so very quickly I was assigned to [a business area's] team, which was basically myself and another couple of people, another couple of Business Analysts, and I've been in that role ever since really, which is quite unusual for [SS] because there're a lot of changes at the time when I've been there".</i>
BA5	Business Analyst, involved within the project since April 2012, working for a business area	Previous junior staff for data entry Contractor at AsiaPac University	<i>"I first came to know about [SS] when I applied for a job here. I had been a university student and I hadn't heard anything about it. That was in April 2012. When I started I was just doing data entry and then I was promoted to be a business analyst".</i>
BA6	Business Analyst, involved within the project since May 2012, working for a business area	Professional business analyst Contractor at AsiaPac University	<i>"They're not business analysts, neither of them, but for me, I'm different, because I've already worked as a business analyst for a long time now, like four, six years. So I would be looking differently from what they're looking (at)".</i>

BA7	Business Analyst, seconded from the Student Services Centre into SS project in 2010 working for a business area, but left the project in 2013, back to a permanent position in a university division since then	<p>Previous non-academic administrator</p> <p>Long-term university employee</p> <p>Ex-business Business Analyst in SS Project</p>	<i>"I would say that the people from the business were very undervalued compared to business analysts from, external business analysts. I felt like we had a lot of knowledge because we already knew what things needed to do. There was no value really on that, it was... And I was told several times that 'oh well, this person comes from the outside and they're just adding so much value to the project and they are doing wonderful things', and that was good, they had a high, you know, they valued those people. But I think they really undervalued people from the business who actually had, did know how processes were meant to work and understood more the philosophy of the university".</i>
BA8	Business Analyst, involved within the project since March 2013, working for a business area	<p>Previous non-academic administrator</p> <p>Ex-business Business Analyst in SS Project</p> <p>Contractor at AsiaPac University</p> <p>Business analyst with IT background</p>	<i>"I learned about [SS] many years ago when it first started because my friend is a BA for the initial specifications of the system. I heard about it also through, I used to work in [a university department] before I took this job. And I knew it was going on but it wasn't until 2012 that I applied for a job to be a BA and I got this job in March, April 2013. I thought this would be a good way for me to learn, but I've been in IT for 25, 30 years and I've done nearly every facet of IT, like systems, administration database, administration and I'm mostly a data person, so I thought that being a data person previously and my attention to detail would actually help me in being a BA and designing the system".</i>

TW1-5 <i>Technically focused project workers (System Programmers, System Developers, System Testers)</i>			
TW1	System Programmer, seconded from University IT Division to work in SS Project	IT technician at AsiaPac University University sourced project staff Long-term university employee	<i>“Theoretically I work half time [SS] because I work half time, you know the current student system, I work on the program for that. So on top of that I have been working at it for quite a few years. Then once [SS] started, like we were involved in the data conversion part of it, so we’re people work on the current system to work on the program to start converting all the data for the new system”.</i>
TW2	System Developer, seconded from University IT Division to work in SS Project	IT technician at AsiaPac University University sourced project staff Long-term university employee	<i>“So what happened was [IT Division] changed their funding structure and effectively most jobs, [a team leader’s] job, my job and [another staff member]who was a member at the time’s job got kind of sucked into [SS] so we are still [IT Division] people but we are semi-permanent loan to [SS]”.</i>
TW3	Integration team leader, seconded from University IT Division to work in SS Project	IT technician at AsiaPac University University sourced project staff Long-term university employee	<i>“I’m fairly IT focused. My background is technical, yes. Now, that’s another cultural problem that I’ve had here, is that I have a very strong software development background, and I’m used to a set of processes around software development, so collecting requirements, producing designs, delivering the product, getting it tested and release it, now whereas a lot of people, other people do not have a software development background, they are used to ‘Why are you doing all that overhead, that documentation? I can just go in and do something quickly’”.</i>

TW4	Environment communication coordinator, who previously worked in University IT Division, and when finishing contract, became fully engaged in SS Project since December 2012	IT technician at AsiaPac University University sourced project staff Contractor at AsiaPac University	<i>“If I have to choose I would probably say I’m technically focused, but the nature of my role is that I do need to be able to bridge that gap between the two groups, so I need to be able to understand why, how is..., sort of what do I need through environments, but I also need to be able to go and talk to [IT Division] and until the database administrators understand that”.</i>
TW5	System tester, recruited from an external specialist consultancy company	IT technician Professional system tester Contractor at AsiaPac University	<i>“The testers, when I started, there were three of us from [an external specialist consultancy company], and then later they increase the number which got to five more tester from [the external specialist consultancy company], so we had quite a big team at the time all from [the external specialist consultancy company]. After December, they decided ‘okay, it’s too early to have so many testers’. Because we are all contractors, they just didn’t renew the contracts. (...) Most of us are actually on contract except those from the university role. I don’t know they come up here to work on this project, after they finish, whether they go back. (...) Now they have, all the BAs have finished all their BA role, they moved them into testing but they’re not experienced testers, so they are not really testers”.</i>

TT1-2 Training team (Training Developer and Training Agent)			
TT1	Training Manager, involved within the project between June 2012 and 2013	Contractor at AsiaPac University	N/A
TT2	Training Developer	Contractor at AsiaPac University	<i>"I'd already heard about [SS] before I worked in [SS]. I was working in [IT Division] and I heard about [SS]. I didn't really know what exactly they were doing but I heard it was a bit of a basket case that would be the word most people use (laughter). (...) I was recruited by the Training Manager when I was working in a private company. So the contract there finished. She said I might suit the skills in [SS] so I ended up taking up a contract in [SS]"</i>

APPENDIX 2 – FIELD NOTE EXAMPLE

Date	28th February, 2013
Time	12:30pm-02:00pm
Place/location	SS Project Meeting Room
Topic	Weekly Project Management Meeting
Participants	Project Director PL5, Business Stakeholder BS1, project middle managers PM1 and PM2, and another three project middle managers/stream leaders and a vendor consultant
Content	<ul style="list-style-type: none"> • Review actions • Project Director update • Exception reporting by stream leaders/managers • Update from business representatives
Personal Notes/Observation(s)	<p>A particular interesting observation:</p> <p>After the implementation stream leader (later testing team project manager) PM2 reported the blockers of the implementation stream to PL5, PL5 replied <i>“No excuses to me, [PM2]. (...) Can I suggest that even that activity we don’t have to do that right now? We are talking about data conversion is a number one priority (...)”</i>, followed by some suggestions about what was the first priority to do for the next stage and what was the deadline that PL5 would accept.</p> <p>PL5 said: <i>“Look. Now you know what the number one priority is. I’m going to give you a deadline. I want, in the week before Easter, a presentation to us covering all the different aspects. Is that okay?”</i></p> <p>PM2 hesitated for a few seconds showing signs of reluctance and then replied: <i>“That’s... fine...”</i></p> <p>Obviously, PM2 was not willingly accepting the deadline but he did not say no.</p>

APPENDIX 3 – ETHICAL APPROVAL LETTER

Social Science Ethics Officer
Private Bag 01 Hobart
Tasmania 7001 Australia
Tel: (03) 6226 2763
Fax: (03) 6226 7148
Katherine.Shaw@utas.edu.au



HUMAN RESEARCH ETHICS COMMITTEE (TASMANIA) NETWORK

19 March 2012

Professor Peter Marshall
School of Computing and Information Systems
University of Tasmania
Private Bag 87
Hobart Tasmania

Student Researcher: Yaqian Ye

Dear Professor Marshall

Re: MINIMAL RISK ETHICS APPLICATION APPROVAL
Ethics Ref: **H0012221 - Power Relations in IT Projects: Testing Turner's Three Process Model of Power**

We are pleased to advise that acting on a mandate from the Tasmania Social Sciences HREC, the Chair of the committee considered and approved the above project on 27 February 2012.

Please note that this approval is for four years and is conditional upon receipt of an annual Progress Report. Ethics approval for this project will lapse if a Progress Report is not submitted.

The following conditions apply to this approval. Failure to abide by these conditions may result in suspension or discontinuation of approval.

1. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval, to ensure the project is conducted as approved by the Ethics Committee, and to notify the Committee if any investigators are added to, or cease involvement with, the project.
2. Complaints: If any complaints are received or ethical issues arise during the course of the project, investigators should advise the Executive Officer of the Ethics Committee on 03 6226 7479 or human.ethics@utas.edu.au.

A PARTNERSHIP PROGRAM IN CONJUNCTION WITH THE DEPARTMENT OF HEALTH AND HUMAN SERVICES

3. Incidents or adverse effects: Investigators should notify the Ethics Committee immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
4. Amendments to Project: Modifications to the project must not proceed until approval is obtained from the Ethics Committee. Please submit an Amendment Form (available on our website) to notify the Ethics Committee of the proposed modifications.
5. Annual Report: Continued approval for this project is dependent on the submission of a Progress Report by the anniversary date of your approval. You will be sent a courtesy reminder closer to this date. **Failure to submit a Progress Report will mean that ethics approval for this project will lapse.**
6. Final Report: A Final Report and a copy of any published material arising from the project, either in full or abstract, must be provided at the end of the project.

Yours sincerely

Katherine Shaw
Ethics Officer
Tasmania Social Sciences HREC

APPENDIX 4 – PARTICIPANT INFORMATION SHEET

School of Computing & Information Systems, UTA

Participant Information Sheet [ethics reference number: H0012221]

PARTICIPANT INFORMATION SHEET

SOCIAL SCIENCE/ HUMANITIES

RESEARCH

'Power Relations in IT Projects: Applying Turner's Three Process Model of Power'

1. Invitation

You are invited to participate in a research study that will examine power relations in an IT project. The study is being conducted by Professor Peter Marshall, Dr Kristy de Salas and Yaqian Ye from the School of Computing and Information Systems and Dr Max Travers from School of Sociology & Social Work at the University of Tasmania. Yaqian will be under the supervision of Professor Peter Marshall and Dr Kristy de Salas and will be conducting this research in partial fulfillment of the requirements of a Doctor of Philosophy (Computing) Degree.

Professor Peter Marshall (Chief Investigator)

Phone: (03) 6226 6255

Email: Peter.Marshall@utas.edu.au

Dr Kristy de Salas (Co-investigator)

Phone: (03) 6226 6200

Email: Kristy.deSalas@utas.edu.au

Yaqian Ye

Phone: (03) 6226 2189

Email: Yaqian.Ye@utas.edu.au

2. What is the purpose of this study?

The main objective of this research project is to learn about the effective and ethical use of power in order to achieve the successful implementation and institutionalization of information systems and technology.

3. Why have I been invited to participate?

You are eligible to participate in this study because you are employed (or used to be) in an organization that has agreed to be part of this research. Your involvement is voluntary and you can withdraw at any time without penalty.

4. What will I be asked to do?

School of Computing & Information Systems, UTA

Participant Information Sheet [ethics reference number: H0012221]

For you as a participant, you will be invited to take part in an audio recorded interview (of not longer than an hour in duration) which will be used to gather the necessary information required by the investigators to develop an understanding of power relations in an IT project.

It is important that you understand that your involvement in this study is voluntary. While we would be pleased to have you participate, we respect your right to decline. There will be no consequences to you if you decide not to participate, and this will not affect your treatment / service. If you decide to discontinue participation at any time, you may do so without providing an explanation. All information will be treated in a confidential manner, and your name will not be used in any publication arising out of the research. All of the research data will be kept at the University of Tasmania in a locked cabinet in the office of the Primary Researcher. All data will be destroyed under appropriate supervision after the mandatory 5-year period.

5. Are there any possible benefits from participation in this study?

It is hoped that, over time, you will benefit from this research through your organization becoming more aware of the role of power within IT projects and becoming more efficient and effective in the implementation and institutionalization of information systems and technology. It may also result in you personally gaining a better understanding and appreciation of the potential impact of power relations within IT projects. We will be interested to see if you experience makes any other benefits from your participation in this study.

If we are able to take the findings of this research and link them with a wider study, the result may provide valuable information for others and it may lead to a wider understanding of the challenges to be overcome and the potential benefits offered to organizations, such as yours, by gaining an understanding of how the exercise of power can be influential within software projects. This information may be relevant to similar organizations, policy makers who utilize your organization's services, and academic researchers interested in understanding and improving the management of information in businesses.

6. Are there any possible risks from participation in this study?

There are no risks anticipated with participation in this study.

7. What if I have questions about this study?

If you would like to discuss any aspect of this study please feel free to contact Yaqian Ye on (03) 6226 2189, Professor Peter Marshall on (03) 6226 6255 or Dr Kristy de Salas on (03) 6226 6200. Any of us would be happy to discuss any aspect of the research with you. If you request it you will be provided with a copy of the transcription of your interview that you can change if you so desire prior to the results being written up.

This study has been approved by the Tasmanian Social Science Human Research Ethics Committee. If you have concerns or complaints about the conduct of this study you should contact the Executive Officer of the HREC (Tasmania) Network on (03) 6226 7479 or email human.ethics@utas.edu.au. The Executive Officer is the person nominated to receive complaints from research participants. You will need to quote HREC reference number-[\[H0012221\]](#).

Thank you for taking the time to consider this study.

School of Computing & Information Systems, UTA

Participant Information Sheet [ethics reference number: H0012221]

If you wish to take part in it, please sign the attached consent form.

This information sheet is for you to keep.

APPENDIX 5 – CONSENT FORM

School of Computing & Information Systems, UTAS

Participant Consent Form [ethics reference number: H0012221]

Title of Project: ‘Power Relations in IT Projects: Applying Turner’s Three Process Model of Power’

1. I agree to take part in the research study named above.
2. I have read and understood the Information Sheet for this study.
3. The nature and possible effects of the study have been explained to me.
4. I understand that the study involves audio recorded interviews for not longer than an hour in duration.
5. I understand that if I require I will be given an opportunity to review the transcriptions of the audio recording of my interview and request changes.
6. I understand that there are no foreseeable risk(s) involved in participation in this study.
7. I understand that all research data will be securely stored on the University of Tasmania premises for five years from the publication of the study results, and will then be destroyed.
8. Any questions that I have asked have been answered to my satisfaction.
9. I understand that the researcher(s) will maintain confidentiality and that any information I supply to the researcher(s) will be used only for the purposes of the research.
10. I agree to participate in this investigation and understand that my participation is voluntary and that I may withdraw at any time without any effect. If I so wish, I may request that any data I have supplied to date be withdrawn from the research.

Name of Participant: _____

Signature: _____

Date: _____

Statement by Investigator

☐

I have explained the project and the implications of participation in it to this volunteer and I believe that the consent is informed and that he/she understands the implications of participation.

If the Investigator has not had an opportunity to talk to participants prior to them participating, the following must be ticked.

☐

The participant has received the Information Sheet where my details have been provided so participants have had the opportunity to contact me prior to consenting to participate in this project.

Investigator's name: _____

Investigator's signature: _____ Date: _____